SUPPLEMENT.

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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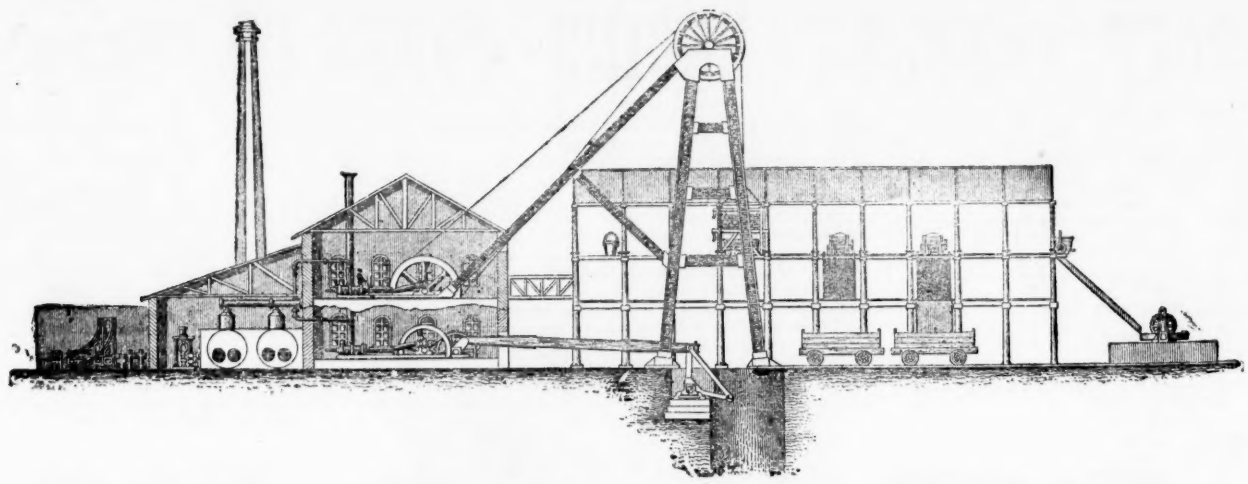

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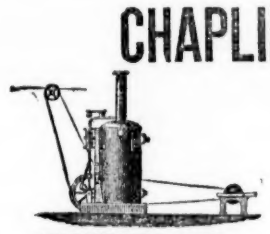

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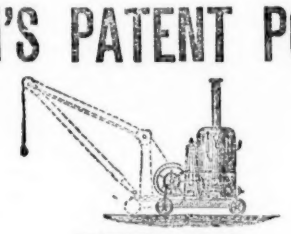

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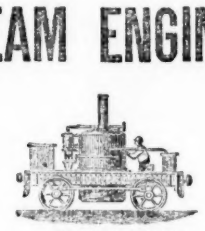

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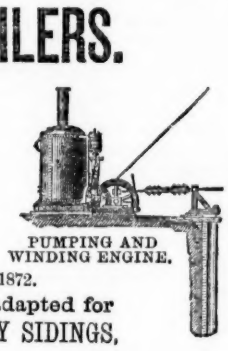

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SILVER MEDAL (HIGHEST AWARD), MELBOURNE EXHIBITION, 1881, for

"EXCELLENCE OF MANUFACTURE."

PARIS—1878.

MELBOURNE—1881

ROYAL AGRICULTURAL SOCIETY'S SHOW AT DERBY.

[FROM OUR OWN CORRESPONDENT.]

The annual meeting and exhibition of the Royal Agricultural Society was completed under the most favourable auspices at Derby on Monday, and the result has been materially to increase the influence of this deserving Society, not only in the Midlands, but also generally throughout the country at large. The weather was charming, the site—a private park in the immediate vicinity of the town—one of the prettiest that we have yet seen chosen for a "Royal Show," and the total of visitors far in excess of last year's meeting at Carlisle. The Prince of Wales and a distinguished suite was present on the 11th, the town being elegantly *en fête* for the occasion, and amongst the foreign, &c., visitors interested in agriculture we observed the Vicomte de Colonne and M. Decauville, representing the Société des Agriculteurs de France; M. le Comte de Retz, on behalf of the Société Nationale d'Agriculture de France; Prof. Grandvoinnet, of the Agronomical Institute, deputed by the French Government; and the Rev. Canon Bagot, Colonel Vesey, and Mr. Robertson, on behalf of the Royal Agricultural Society of Ireland.

The show of horses, cattle, and sheep was somewhat smaller than at Carlisle last year, but the machinery exhibits were considerably in excess of those at the more northern city—all the leading manufacturers, not only of agricultural machinery, but also of artificial feeding stuffs, manures, &c., and the principal seedsmen of the kingdom uniting to form an exhibition the like of which is never seen save at the "Royal," and the like of which has never yet been seen to greater advantage than at Derby during the last fortnight. With the animal classes we have little interest in a journal of this class; and, indeed, as has now been the case for some years past, there was little of real novelty in the machinery department, although "improvements" seemed to be the order of the day in almost every section of agricultural appliances. The judges were this year empowered to award a special gold and silver medal for the self sheaf-binding machines, which, after a trial in the harvest season, shall in their opinion prove the best and second best—the binding material to be other than wire. Besides these special medals there were ten ordinary silver medals which were offered for competition amongst "new inventions," the award of which the judges had the power of recommending in cases of sufficient merit in new implements or improvements, and also for efficient modes of guarding or shielding machinery, especially were worked by steam, from contact with persons immediately engaged in attending to such machinery while at work. The precise period for the trials of the sheaf-binders is not yet fixed; but it is expected that they will take place in the close vicinity of Derby during August next. Of the other ten silver medals the judges have only recommended two exhibits as worthy of this special distinction, although they admit that there are several useful and interesting improvements upon last year's show. The successful exhibitors are—Messrs. J. M. Ladd and Co., of Queen Victoria-street, for their "Perpetual Baling Press," which has already been noticed in these columns, and Mr. R. W. Taylor, of Bury St. Edmund's, for a very practical guard for circular steam-saws.

The entries for the special gold and silver medals for sheaf-binders numbered no fewer than 28 (25 makers), and the English manufacturers were considerably more to the front than previously—for it must be remembered that this is not the first time that the gold medal of the Society has been offered for a really practical invention of this class. The competitors included Messrs. Aultman and Co., America and London (combined, twine); Bamlett and Co., Thirsk (two combined, and one separate, string); Howard and Co., Bedford (combined, cord); Hornsby and Sons, Grantham (combined, string); the Johnston Harvester Company, America and London (one combined, and one separate machine, string); Kearsley, Ripon (combined, string); King, Stroud (combined, string); Mr. M'Cormick, Harvesting Machine Company, America and London (combined, twine); the Notts Fork Implement Company, Ranskill (separate, string); Osborne and Co., America and Liverpool (combined, twine); Raymond, Lothbury (combined, string); Samuelson and Co., Banbury (combined, string); Spencer and Co., Duffield (separate, string); Wood, W. A., London (combined, twine or string); Woolnough and Co., Kingston-on-Thames (separate, string). Inasmuch, however, as the trials do not come off until the harvest, and as the regulations allow the manufacturers to modify their exhibits between the show and the trials it is quite possible that the criticism which the competing machines have alrealy undergone may induce considerable alterations before next month. We have not space to go through the merits of each exhibit at the present moment; but we shall have a very opportune occasion for doing so when the trials shall have taken place. Suffice it now to say that, in our opinion, an increasing conviction is growing upon the agricultural and practical public that the binder of the future must be in a "separate" form. These latter appear to much more simple, compact, and convenient, and are obviously so much lighter to work that it would seem highly probable that agriculturists will before long exhibit a decided preference for the two manageable machines, instead of for the more cumbersome and unwieldly implement.

One of the most novel and, at the same time, most promising of these binding machines is the "separate" binder exhibited by the Notts Fork and Implement Company, of Ranskill, Bawtry, Yorkshire, and consists of two broad curved collecting plates, up which four gathering arms traverse. These bring the grain under the string, which is stretched across the top As the sheaf gets above the level of the knotting arm the needle comes back, and, catching the two ends, ties a secure knot, and clips the twine. The sheaf then falls over the back, being guided by an arm, which may be fixed on either side at pleasure. For over-ripe corn an opinion is expressed that the fall seems too great; but this, of course, is a point which will be apparent in working. It may be added that one horse and one man are only required to work the machine, and that the price is 30*l*.

Messrs. W. and C. Woolnough's "separate" exhibit consists of a rake of seven tines, similar to an ordinary horse rake, gathering the grain into two collecting arms, which bring it over into the binding arm. The tine can be regulated for the size of sheaf required, and the whole can be thrown in or out of gear at a moment's notice in case of obstruction. It is mounted upon three wheels, so that should one be over a furrow the other two will carry the machine. The same firm also exhibit a binding attachment, which was shown upon one of Samuelson's reapers, but may be attached to any ordinary reaper. For a combined machine this certainly struck many as being remarkably simple, light, and compact. The platform and binding table are in one, the ordinary platform being removed, the binding attachings taking its place. The reaper is very little increased in weight. The driver has full control, and can regulate the size of the sheaf, or stop and start the binding attachment with one foot; and, as most of the modern reapers are constructed, the lever which controls the rakes can be employed to regulate the binder, as, when binding, all the rakes are permanently set as dummies, The price, by the way, of both the "separate" or unattached binder is 30*l*.

The automatic saw-guard, which has been awarded one of the ordinary silver medals as a "new invention or improvement," was exhibited by Mr. R. W. Tayler, of Bury St. Edmund's. The necessity for a safety apparatus of this kind is manifestly extensive under the directions of the Factories Act, by which it is ordered that all dangerous machinery shall be protected where it is possible to do so, and the rapidity with which Mr. Tayler's ingenious invention is coming into use speaks well for its practical success in surmounting the danger it was designed to guard against. It is difficult fully to describe it without a diagram, and we hope shortly to obtain one; but we may mention that its operation was watched with considerable interest during the continuance of the show, and that it has already been adopted—so we are given to understand—not only in the Royal Arsenal, and in many of the Government departments, but also in several of our railway and industrial establishments.

The "perpetual bale press," for which the only other silver medal of the Society has been awarded, is a most useful adaptation of power in mechanics, is upon a new principle, and differs from any other press that we have yet seen, being designed to form as well as to discharge the bale without further assistance than the pitching of the loose material into the hopper. The machine may be worked by horse, steam, or any other power, and where desired can be mounted upon wheels. It is made in many sizes and strengths, and obviously is very useful for a variety of purposes.

An ingenious contrivance, which is called Watling's tip van, was shown amongst the numerous exhibits of Messrs. Hayes and Son, of Stamford and Peterborough. The principle consists of making the body of a van or wagon slide over the vertical frame upon which it is carried, so that it may discharge its load as effectually and quickly as a two-wheeled cart. "So well," says a technical contemporary, "has the principle been worked out that the wagons or vans are now built in all sizes, to carry from 1 to 4½ tons, and that one man is able to discharge this latter great weight, and to replace the wagon in its original position with very little labour." It is run on four wheels, so that a horse is enabled to draw nearly double in weight what he could have pulled had it been made to run on two wheels only, and the torture of bearing and strain inseparable from two-wheeled vehicles is avoided. These useful vans are adapted for many practical purposes—such as carrying coal, ashes, stone, clay, &c., and have, indeed, been adopted in London and other important municipalities for carrying street sweepings in wet or dry weather.

Messrs. Holmes and Son, of Norwich, exhibited a new turbine drainage pump, designed and manufactured by themselves, being constructed to drive at will direct from the crank-shaft, or by a pulley and strap from fly-wheel, the whole appearing very compact and complete. These pumps, we are told, are being erected of various sizes, and, worked by wind-power and steam, both by portable and fixed engines, are stated to be capable of raising and of delivering from 6000 to 15,000 gallons per minute, at lifts from 5 to 17 ft. high. When made in iron cases they are easily fixed, and may be got to work in a few hours, those who have used them giving them an exceedingly good name.

Mr. H. R. Marsden, the well-known ore-crushing machine maker, of Leeds, of whose machines it has been graphically but truthfully written "you may put in a paving-stone, and it comes out like flour," showed a new specially fine crushing implement of curious and interesting make. Mr. Marsden, as most of our readers know, has had considerable experience in the manufacture of this class of machine, for which there is inevitably a mighty future looming in the womb of time, and he tells us that in the speciality under notice, any description of stone or other material may be introduced, but that none of it will come out until it shall have been reduced to the absolute degree of fineness required, and that none will be ground any more fine than may be required. It follows greatly upon the lines of the well-known Blake-Marsden crushers and breakers, and is made of the following sizes at the mouth—12 in. by 3 in., 20 in. by 3 in., 20 in. by 5 in., and 24 in. by 6 in., whilst for one of the 20 in. by 3 in. size 4-horse driving-power is ample for several materials, and it does not need more than 6-horse power to accomplish the hardest work. Mr. Marsden was awarded the first silver medal for this machine at the last meeting of the Mining Institute of Cornwall, and the working model and the samples of the work which it turned out were inspected with considerable interest not only by English engineers, but also by several distinguished foreign scientific visitors during the Derby show. Two of the large ordinary crushing machines were also exhibited in full operation—one the well-known Blake-Marsden stone-breaker, 15 in. by 10 in., mounted upon travelling wheels, and fitted with screening apparatus, for making road metal; and the other a new 15 in. by 8 in. lever stone-breaker or crusher on travelling wheels.

Dixon's balance crane, for lifting small weights, and which has the merit of being able to be conveyed to the load, and of not requring the load to be brought to it, is the most useful little mechanical contrivances of the sort we have ever seen. It was exhibited by Messrs. S. and E. Ransome and Co., of No. 10, Essex-street, Strand, W.C., who are well known in the world of applied science and mechanics for the many excellent novelties which from time to time they have introduced. The special advantages of the crane—after its useful "Mahomet Mountain" like adaptabilities—are it is well balanced; for instance, when a weight is lifted, and is too heavy for the back of the crane, it is prevented from toppling over by the two feet which project in the front of the frame, and are curved down. The jib may then be raised by means of the screw, which in turn is worked by the handle at the back of the crane until the distance between the weight and the centre of the front wheels is such that the back part of the crane is heavy enough to balance it. It is self contained, requires no footing, and is effective over every square foot of a warehouse, wharf, or station platform. It can be moved about on a level floor by one man with a load of from 6 cwts. to 10 cwts. Although it only occupies the standing room of an ordinary hand-cart, having a length of about 7 ft. 6 in., with a jib of 10 or 12 ft. high, as occasion may require, the width is 2 ft. 6 in. There is a manifest saving of time and labour in this machine.

Mr. W. Allchin, of the Globe Works, Northampton, showed a very handy new wall-hoist, which may be affixed to the wall of a building, &c., no matter where, and which may be worked with ease as well in one position as another, the handle being in the front, instead of at the end, as is usual with the general run of wall-hoists, which are thus only adapted for use in certain positions. The main principle in Mr. Allchin's speciality seems to consist in a worm and pinion arrangement, which in itself would be sufficient to prevent it running down with a load on, and when a brake is applied as well the whole is, of course, more secure. It may be, therefore, considered as an improvement for the safety of the user. When required for work the frame is fixed either to a wall or post, and one end of the rope is wound round the barrel or drum, the other end being passed over a jib or pulley, where convenient—in some cases the jib being dispensed with.

Mr. John Whitehead and Co., of the Albert Works, Preston, showed what we understood to be an improved specimen of one of their ingenious fan process brick-making machines, by means of which the processes of hoisting the clay, crushing, pugging, and brick-making are carried on at the same time. The hoisting gear, it may be explained, brings up the clay to rollers which crush it, and the gearing can be at will thrown into and out of work, a friction belt and brake being also supplied to control the speed of the empty wagon on the incline. These crushing rollers are no less than 22 in. in diameter, and are constructed, so we are informed, from a mixture of the hardest irons, being constructed upon an improved principle, by means of which the working parts are much more comeatable, and can be more readily renewed than was the case before. The brick dies, also, are of a peculiar principle, upon which we cannot dilate; but which, we were informed, was only the result of long and patient experience. The finish of the cut in these machines is very apparent, being clean and accurate, whilst the bricks are deposited upon a moveable board, on which they are transferred to the barrow without being handled. The power required is about 12-horse power, and an average of about 17,000 to 22,000 bricks can be made in a a day, according to the nature of the clay.

Mr. Richard Beckett, of Hartford, Cheshire, exhibited a useful system of earthenware wall boxes for the preservation of the joists and ends of timber, which for any season may be exposed to the action of the weather. It is almost generally known that timber will last for a considerable period of time if only it be kept thoroughly dry or entirely immersed in water; but then it soon deteriorates and becomes decayed when exposed to alternations of wet and dry. The inventor claims that he can prevent these alternations by the introduction of his system, by means of which the ends of the timber are built into the walls, &c., in earthenware boxes, and must evidently be thus protected from many of the vicissitudes of climate, the dampness of walls, the burning soot in a chimney, &c.

Messrs. Sinclair and Co., of Leadenhall-street, also appear to have considerably improved upon their now well-known portable chemical "Dick's Extincteur," and have extended the principle to a fire-engine, one of which they showed, fully equipped as a brigade fire-engine upon wheels to be worked by three men; but not dependent upon any uncertain supply of water, being fitted to contain and send out no less a quantity than 65 gallons of chemicalised water, said to be equal to about 1300 to 15,000 gallons of plain water. It should be further added that the machine may be kept always ready for use.

Amongst the other novelties may be mentioned some very useful tree removers (Messrs. Barron, Borrowash, Derby), which were much admired and which appear adapted for the very easy removal of trees of any size from one place to another without injury to the roots; a new land cleaner and pulveriser, invented, manufactured, and exhibited by Mr. J. B. Higgs, of Cowen, Wolverhampton (not more than 3 ft. of ground, however, appears to be covered at each working of this machine, an objection, especially for heavy ground, which we hope will be soon removed); Darby's steam-digger (Darby, Pleshey, Chelmsford), and which was working, at stationary work only for the first time before the general; Cooke's "gang" and "turnwrist" ploughs (Cooke, Lincoln), in which "John Hodge" is allowed to ride, and which, as the patentee contends, "will work a considerable revolution in the agriculture of this land;" a new machine for "dibbling planting holes" by the same manufacturer; a new design applied to traction engines by Messrs. Aveling and Porter, of Rochester, and which consists principally in the adoption of a compound cylinder, which, it is claimed, will give better results for less expenditure. It has already been applied to several steam-engines, and with considerable success; an improved clay grinding pan (Fawcett, Cromwell-street, Leeds), being fitted with the exhibitor's patent wrought-iron, so that it cannot be broken, as in the case of cast-iron pans; it is also provided with an improved footstep bearing, also with improvements for taking the weight of rollers off the pan bottom, when running empty the machine may be used for grinding shale, bind, marl, &c.; a plastic brickmaking machine (Bennet and Sayer, Derby), which created considerable attention, no skilled labour being required to work it, and the parts being all machine made; the well-known steam travelling excavator and dredger of Messrs. Priestman Brothers, Hull, was hard at work, and its operations never failed to afford considerable interest to a crowd of spectators.

NOBEL'S BLASTING GELATINE.

An interesting gathering recently took place at the Glenarm Quarry, near Belfast, belonging to the Eglinton Chemical Company, to witness a large blast with Nobel's Blasting Gelatine. Under a cliff, above 120 ft. high, the company's men have for some weeks past, under the superintendence of Captain Jamieson, the manager, been chambering the rock from 25 ft. to 30 ft. inwards, and for a distance of 110 ft. along the bottom. Four large limestone pillars were left in front, and several wooden props were inserted at the back to sustain the rock. Each of these four pillars had from four to five deep boreholes made in them, and into each of the props, which it was not prudent to remove, one small borehole was made. The boreholes in the pillars were then charged by Mr. Mulholland with from 1 lb. to 2 lb. of Nobel's new patent explosive "blasting gelatine," and the holes in the wooden props with 4 oz. each. An electric detonator with insulated wires, was put into each of the holes, and also an ordinary detonator and fuse, so that if anything went astray with the electric machine, or only some of the shots were exploded by it, the remainder would be fired by the time fuses. The wires were next all coupled up in circuit with the main wires connected to the electric machine. When all was arranged Captain Jamieson gave orders for the men to fire the time fuses, and when they had retired he directed Dr. O'Connor, who was at the electric machine with Mr. Mulholland, to fire the charge. In a few seconds the electric discharge was passed through the wires, which successfully exploded the electric detonators and "blasting gelatine" lodged in the pillars. The pillars having been well blasted, down tumbled the immense cliff, with many thousands of tons of limestone. It was a grand sight to see the cliff falling, and all present were highly pleased with the complete success.

Referring to the result of the blast, Capt. Jamieson remarked that by the aid of Nobel's explosives they had first undermined the cliff and now with about 26 lbs. of Nobel's new patent explosive blasting gelatine the pillars upon which it was resting were successively cut away, so that they had the grand fall witnessed that day. No doubt they might have succeeded in a more limited extent with gunpowder, but they would have required to make the pillars weaker, and drill more holes in them to contain the necessary quantity of gunpowder to blast them away. He must admit that Nobel's dynamite, which he had been using with safety for the past eight years in their quarries, had been most useful to them, and now they had that day witnessed the performance af Nobel's gelatine. Nothing could have done the work better. He had tested it on previous occasions in breaking up blocks of limestone, and found it much superior in strength to dynamite, and that it did not shatter or paralyse the stone in the same way as dynamite did, so that he expected blasting gelatine would prove even more useful to them than dynamite had been.

With regard to the safety of dynamite, Mr. J. Carson (Messrs. R. and J. Carson), who has been for six years the local agent of Nobel's Company, said that they regularly received tons of it, ex one of the company's steamers or sailing vessels, into their magazines. They (Messrs. Carson) and their sub-agents have made thousands of sales all over the provinces. It had been conveyed by carts, cars, canals, on horseback, and otherwise, both in the heat of summer and frosts of winter, and, though sometimes the conveyances were upset, there never was an accident with dynamite in transit. Not only was dynamite safer than gunpowder, but it was vastly more powerful, and its use saves both time and expense, as fewer bore-holes were required. Many contractors had told him they could not have completed their contracts in the specified time without it; and if they had had gunpowder only to depend on the expense of their works would have been greatly increased.

The value of dynamite and the advantages of the blasting gelatine were referred to by several speakers, and Mr. Waugh (Messrs. Waugh and Walsh), Messrs. Carson's successor in the local agency, suitably acknowledged the complimentary remarks. Capt. Jamieson remarked that the company gave a great amount of employment at their different quarries to hundreds of workmen, and by attending to the instructions given to them he was glad to say they had no accidents with explosives in the quarries for the past eight years, during which time they have been using dynamite for all their heavy works. They had now got in some gelatine, and so far they liked it very well, and he hoped with the aid of this new explosive and the attention of the workmen that their company would succeed at least as well in the future as in the past. The Rev. John Jellie said that he took a great interest in blasting, having with the aid of dynamite had some fields cleared from boulder stones, which otherwise would have remained comparatively unproductive and useless. He (Mr. Jellie) had a great many years' experience of dynamite, and considered it a very safe explosive, and he was glad to hear that the new explosive was both safer and more powerful. No doubt, any person by carelessness or disobeying the company's instructions might, with a single cartridge, turn himself into jelly. Indeed, dynamite or gelatine would be of little practical use if they could not do so. Dr. O'Connor confirmed the safety of dynamite by observing that for the last eight years there had been no loss of life or limb from any explosive in the company's quarries. He had, however, during that period had to attend several cases of accidents arising from the use of gunpowder in the district, and some deaths had occurred in consequence; but there never had been an accident there from dynamite.

TELEGRAPH CONSTRUCTION AND MAINTENANCE COMPANY.—The half-yearly meeting of shareholders was held on Tuesday, at the offices of the company, Old Broad-street. Sir D. Gooch, M.P. (the Chairman), informed the meeting (to which he had no resolution to submit) that the company had not had much work in hand during the past half-year. They had made only 200 miles of cable, but they had chartered one of their ships to the Government for the conveyance of troops to the Cape, and be believed that the work was performed to the satisfaction of the Government. Another of their ships, the Scotia, had been employed in cable work, and had recently returned from picking up and repairing the Brest cable of the Anglo-American Telegraph Company. They were doing their best to obtain work, but there was no doubt that there was a lull at the present moment in cable work. Mr. William Abbott asked whether the company could not ally itself with some of the electric light companies or electrical invention, so as to fill up the void when cable work was slack. The Chairman, in reply, said they had not overlooked the matter, and they were now making a considerable amount of the covering wires for the electric light. In answer to other questions he stated that the last French line and the direct cable were made by Messrs. Siemens, of England, whose competition they had had for several years, and

must be prepared to meet in the future. The dividend would be the usual interim distribution of 12s.

Original Correspondence.

THE FUTURE OF TIN AND COPPER MINING.

SIR,—The ease with which so many new mining ventures have been floated, and the continuous procession of prospectuses, show that investors are at a loss to know what to do with their money.

That the gold fields of India should receive attention is quite natural and creditable to the British public. But whether it is wise to take for granted that so many of these mines will be good before proving one of them is a question yet to be answered by all but the most sanguine or interested promoters. Uuder any circumstances it is satisfactory to note that the product when obtained from these mines at a profit or at a loss will not have a very serious effect on the value of the metal sought after.

Another direction that the present craze is taking will ultimately prove beneficial. I refer to the reworking of the old Cornish mines for tin. Some of these will be found good; they were worked when power-drills, high explosives, skip-roads, and rock-breakers were not thought of, so that the facilities of the present day afford a good margin for profit when compared with the style of doing things when these industries were at work. A liberal and judicious use of the improvements of to-day, not forgetting the necessity for handling heavier loads in shafts when hoisting, would effect such a change in Cornwall that the old country would stand ahead as a tin producer, no matter what discoveries are made elsewhere. The prospects for tin mining are quite healthy; good profits are being made at present price of tin where work is being carried on extensively. Stocks of tin are limited, are being depleted with regularity, and the use of the metal is steadily increasing. It rests very much with Cornwall as to how much of the business will be done there in future. Cheapening production will do more to check competition than anything else. It is more than likely that a high price for tin will again ensue. This will lead to the opening of more surface mines in the East, and ultimately to a flooding of the markets. For this reason it is apparent that a moderate rise in the price of tin is more desirable than anything excessive.

Mining for copper is also receiving a good deal of attention in England. New mines in Australia, Spain, Germany, Bolivia, Norway, Cornwall, Canada, and elsewhere have been taken up by the public since the beginning of the present year; all of them rich, too. To begin it is well to note the European stock of copper—say, 60,000 tons. Chilian produce of the metal has been much demoralised by the late war with Peru, and imports from the West Coast have much fallen off in Great Britain in consequence. For the first four months of the year, according to the London Economist, the falling off in imports were as follows:—

Copper ore, decrease	.....	7835 tons
Regulus ore "	.....	2378 "
Wrought copper "	.....	5247 "

And yet the stocks held in Europe, according to the last *Mining Journal* to hand, are but little less than the highest point reached. Another significant point is the fact that British mines in 1856 produced 24,257 tons of fine copper, and in 1879 only 3462 tons of the metal. Those who invest in copper mines with the idea that Chili is out of the field permanently are labouring under a mistake, for though depressed by the late war Chilian industries must revive, and mining is the prominent resource of the country. I quote from the City Article of the *Mining Journal*, May 21—"* * * reduces the stock (Chili copper) to 31,466 tons, as compared with 32,060 tons on the 29th ult. Notwithstanding these improved statistics, yet the demand is not stimulated, first because consumers can buy Spanish pyrites and precipitates more advantageously than they can secure Chili bars; and, secondly, on account of the total stock of other kinds of copper being so very heavy that it forms a most effectual check to the expansion and development of the speculative demand."

Now, I ask, with the demand, if not at a standstill, increasing very slowly, with the stock that is being carried with the aid of cheap money, what is to become of the copper market when other heavy producers come into the field? Is it any wonder that consumers buy sparingly? A glance at the accounts of the Spanish Pyrites Mining Company and at the profits they earn, and then at the report of the South Caradon Mine, in Cornwall, shows where the shoe pinches. The mine last named "looks very well," and earned a profit of 33*l.* in three months. It was with some amusement that I perused the report of the Michipicoten Copper Company recently. Capt. Opie, the manager for the company, was up this way recently, and he probably was struck with some of the remarks made at that meeting. The Iron Age (June 30) was, for it says:—

An English company has been formed to work the copper mines of the Island of Michipicoten, on the north shore of Lake Superior. At a recent meeting the opinion was expressed that the company would be able to enter their granular metallic copper into this country as ore without paying duty. In view of the fact that this ore is pure copper, and need only be remelted to be cast into ingots, it is likely that our customs officers will take quite a different view of the matter.

Now, referring to the copper market in this country, it may be stated that 4000 tons of ingot goes to Europe this summer, proof undoubtedly that there is available copper enough in the United States, and the half has not been told yet. A correspondent of yours, Prof. Cazin, for a long time has told about the copper deposits of New Mexico and Arizona, and the building of railroads in those territories is reviving stories that are simply incredulous. The usual discount must be made, and even then there should be a good deal left. The Iron Age, generally a well-informed paper, says—"We understand that a leading metal house has contracted with the Copper Queen, the largest copper mine in New Mexico, for the purchase of all the copper to be made by the same during the current year. The quantity is roughly estimated at 10,000,000 lbs.=5000 tons. This is certainly extravagant, but not any more than many other stories of like import.

A friend, writing from Philadelphia, speaks of the organisation of a copper company there, to mine copper in Arizona, and sends the figures that the public are asked to believe. Two small furnaces are to give a profit of $4900 per day. The figures show care in the putting up, otherwise they would have been made to net $5000 per day. The claim is made that abundance of ore worth 40 per cent. exists, and it can be turned into copper for 1½ c. per pound for ingot. I do not give credence to the stories told without making a good deal of allowance. But the fools are not all on your side of the water, and much copper will be mined at a profit or loss, put on the market, and will still further depress the price of the metal. I clip from the Boston Herald of June 26 the following, on a copper property in Arizona:—

SANTA RITA COPPER AND IRON COMPANY.

The stockholders of the Santa Rita Copper and Iron Company were invited to meet Capt. Slawson, at No. 40, State-street, yesterday forenoon, and hear his report on the Santa Rita Mines, and, in response, some 25 or 30 gentlemen attended. The President of the company, Mr. J. P. Whitney, read a written report of the property made by Capt. Slawson, and the latter gentleman afterwards made statements and answered questions concerning the mines in question, all of which, if reliable, would place them in the list of the most wonderful mines in the world. The captain exhibited the results of hand concentration of the material in the dumps left by the old Spanish workers of the mines, from which he concluded that the material composing these dumps would give a yield of at least 2 per cent. at a mere nominal cost of reduction, and that from this source alone a net profit of over $700,000 ought to be realised. He reports the extent of the mine to be at least 1000 acres, over the whole of which copper can be found near the surface in the shape of carbonates and red oxides, as well as in the native form, in the shape of sheet and shot copper. The carbonates and oxides he estimated to yield at least 20 per cent. of metallic copper. Below the carbonates and oxides he estimated that native copper would prevail altogether. In his report Capt. Slawson told of the cheapness with which the ore, which is in a soft or decomposed porphyritic formation, could be mined, of the abundant water supply for concentrating it, of the cheapness with which charcoal can be made from the inexhaustible forests near by, and that the necessary fluxes are also ready at hand. Indeed, it would seem, from his report, that nature had placed ready at hand all the materials necessary for the cheap production of copper in almost illimitable quantities, and only needing the energy of man to produce any desired result. Capt. Slawson also discovered gold and silver on the property, and gave it as his opinion that these metals existed in paying quantities. But the great deposit of iron was shown by him to be of immense value and extent. It was a pure ore, in the shape of hematite, specular oxide and magnetic iron ore, and he said millions of tons of it could be quarried at a trifling expense, and cheaply reduced with charcoal, making it in itself a perfect bonanza. He thought the iron ore on the company's land of better uniform quality than that found on Lake Superior. Capt. Slawson had been for some years superintendent of the Cliff Mine at Lake Superior, and had paid dividends on a yield of about 2½ per cent. on the ore. He considered that copper ore of the Santa Rita Mines would average about 20 per cent. Upon being questioned as to what he thought ingot copper would be produced for at the mines, he said he thought it would be done for about $50 a ton. This provoked a general smile, as well it might, but he persisted in the statement, and said that, allowing for shrinkages, incidentals, &c., ingot copper from the Santa Rita Mines could be laid down in New York for about 5 cents a pound. At this announcement there was another general smile and expressions of incredulity, but the captain adhered to his statement as if it were a moderate one. That he is a practical man and knows what he is talking about, so far as the mining and treatment of ores are concerned, there is no doubt; but it would seem at first glance that his statements in regard to the cost and extent of production of copper of the Santa Rita Mines should be taken with a grain of allowance. At any rate, even discounting them very largely, it would seem as if the copper property of the company must be an immense one, and that its products may have a most important effect upon the markets of the world. About its iron property there cannot be so much doubt, though, of course, the great value of this property must be largely in the future. What effect the testimony and report of Capt. Slawson may have upon the stock of the company is not certain. Upon the other copper companies it may well have a disquieting effect, though this remains to be seen.

The Capt. Slawson referred to is well known on Lake Superior, and though it would be expected that his listeners would smile, yet he ought to know something about copper. J. D.

Lake Superior, Michigan, July 3.

THE INDIAN GOLD MINING COMPANIES.

SIR,—An article has been pointed out to me in the Journal in which my name is prominently if not over courteously alluded to. My relations with the companies mentioned are erroneously described. As they can, however, be of no interest to the general public I do not consider it necessary to correct the writer's statement. With reference to an opinion of mine referred to in the article I shall be glad to learn from your writer which of the mines at present working in the Wynaad have passed beyond the experimental stage. I can, I think, form as correct an estimate as to the resources of this district as anyone present in England, but I should, nevertheless, be pleased to learn the names of such Indian gold mines as have passed beyond the domain of experiment into that of assured success. The further remarks contained in the article do not concern me, but they are obviously written in ignorance of the actual state of affairs at the place referred to. GEORGE SEYMOUR.

Great George-street, Westminster, July 20.

THE AFRICAN GOLD FIELDS—No. II.

SIR,—In continuation of the communication with reference to British mining enterprise on the Gold Coast, published in the *Mining Journal* of June 25 (page 775), the subjoined will be interesting:—

The statement of Mr. Grant Duff in the House of Commons, in reply to Mr. Story Maskelyne, as to the protection of the gold mining establishments in this district, as reported in the daily papers of Feb. 25, is not only most discouraging to all interested in those enterprises, but is entirely misleading and contrary to facts, which ought to have been within the cognisance of the Under Secretary for the Colonies. Whatever may have been said or done by the late Secretary of State for the Colonies, with regard to affording protection to the gold mines and the persons employed thereat, Mr. Grant Duff must be singularly ignorant of the business of his department, since the accession of the present Ministry to office, if he is not aware that a few months since Capt. Cuscaden, of the Gold Coast Constabulary, was appointed by Lord Kimberley Commissioner for the district of Tacquah, with especial reference to the growing importance of the gold mining companies which have now for a considerable period been prosecuting the work for which they were formed.

As a matter of fact, Capt. Cuscaden reached his post about the middle of March, accompanied by a medical officer, a detachment of Houssas, and a few men of the Civil Police; and in addition to his ordinary duties as District Commissioner has been especially entrusted by the Governor with the task of raising a native contingent from the Wassaw tribe, in which he has already been so far successful as to be promised 5000 men in the event of hostilities occurring with Asshante; not only this, the Commissioner at Axim has instructions in case of necessity to support his colleague here with the contingents of Eastern and Western Apollonia and of Aowin, consisting respectively of 5000 men. Whatever may be the value of native levies generally, it must be within the recollection of all that during the last Asshante war King Blay, of Eastern Apollonia, did good service, and held a large force of the enemy in check, for which he received the war medal and award of honour from the Queen.

It is understood that Sir Samuel Rowe intends paying an easily official visit to Wassaw and the mines, and this doubtless with a view to preparation for defence, as it can scarcely be doubted that an officer of such experience as His Excellency has already recognised the importance of the gold mining interest, and the necessity of placing the mining employees in a position of security. In fact, it is scarcely conceivable that the Colonial Government could entirely ignore the existence of or neglect to protect a large number of British subjects peaceably engaged in legitimate enterprise most important to the future prosperity of the Gold Coast colony, and within territory under the Dominion of the Crown of England, and situated not 50 miles from forts flying the Union Jack.

Seeing that the mines would probably be the first object of attack by the enemy if left unprotected, it would be impossible for the local Government to ignore their existence; and as their position is most admirably calculated for defence by a small force, it would be most culpable to neglect it as a means of arresting the march of a barbarian invading army towards the coast. Effuenta Hill, the seat of one of the mining establishments, might be held by 100 well-armed men, with a couple of Gatling guns, if properly entrenched, against thousands of Asshantis, and there are many places in the immediate vicinity and on the Tacquah ridge equally suitable for defensive purposes.

In conclusion, I may mention that everything is going on as usual at the mines, which are progressing favourably. Labour is plentiful, notwithstanding repeated misstatements to the contrary effect, and there is little doubt that within the next few months several new companies will commence operations, some of them under even more favourable conditions than those already established, and with the advantage of experience gained by the latter in a new and at present somewhat difficult field for mining enterprise. Some rich lodes have recently been struck, and a few years will probably witness a vast development of the immense and hitherto neglected resources of this very rich country, which is unequalled in the whole world as to the quantity of gold which exists in its almost innumerable and practically inexhaustible auriferous quartz reefs, as well as in its extensive alluvial deposits of the precious mineral. F. R. G. S.

Tacquah, Wassaw, Gold Coast Colony, June 10.

CALLAO BIS GOLD MINING COMPANY.

SIR,—A poll was taken on the 8th inst. upon Mr. Staple's amendments—That, considering the satisfactory information received as to the development of the Callao Bis Mine, it is inopportune to enter at present into any arrangement for the sale of any portion of the property. As the directors have not had the courtesy to make known the result to the shareholders—it is now fourteen days since it took place—I beg to call attention to the high-handed tone they are pursuing, and to the unbusiness-like manner of their proceedings from the inception of this unfortunate company to the time. At the next meeting, I hope the shareholders will rally round Mr. Staples in the proposition he will make to unseat the directors, and to appoint a committee to investigate the accounts. If it will 50,000*l.* to develope the Callao Bis Mine, how is it that 26,000*l.* will be sufficient for the Sosa-y-Mendez Mine. Will Mr. Attwood answer that little query? I should much like to know who Mr. Kent is; is he employed by the Private Investors' Association or by the directors of the Callao Bis Mine? for I cannot understand any *bona fide* shareholders desiring to sell the greater portion of the valuable property for a much less sum than was originally paid for it. If we go on throwing away money like this, I fear we shall laugh the other side of the face. I trust Mr. Staples will procure some old Australian miners that have made their little pot of money to take a seat at the board. Business men are required to carry out to a prosperous issue a valuable mine like the Callao Bis. There are many directors who could not tell the difference between a piece of copper or gold; doubtless they would know pipe-clay directly they saw it. RAMSEY COOKE, R.N.

Earl's Court Road, Kensington.

GOLD MINING IN AUSTRALIA.

SIR,—As English capital is now being invested both here (New South Wales) and in Queensland, the following extracts may prove of interest to some of your readers. As regards Gympie (Queensland) the North Phœnix Mine is thought so highly of in Melbourne that it is said 100,000*l.* has been offered for it by Victorian capitalists, and the North Glanmire is following close in its footsteps, having already given 23,000*l.* in dividends in five months; whilst many other mines are now being reworked profitably that have lain idle for the last seven or eight years.

As regards our own alluvial field at Temora, rain has lately fallen, and enabled them to begin washing up, and the yields so far prove this to be one of the richest fields yet opened here; and experienced miners say there is at least six years work in the known leads, whilst the general appearance of the country round about gives promise of extensive deposits beside those now opened up. There is a strong revival in mining through all the colonies, and guided by the experience gained in the mania of 1871, and warned by its failures, there is every prospect of real success now that persistent effort proves that knowledge and skill, when combined with adequate capital, are pretty sure to achieve a real and profitable return. R. D. ADAMS.

Sydney, June 3.

LATEST FROM TEMORA, NEW SOUTH WALES.

TEMORA, THURSDAY, MAY, 1881.

Rain fell on Tuesday. The escort left with over 2000 ozs.

Two hundred loads from spare ground in Deutscher's averaged 2 ozs. per load; 1700*l.* worth of gold was picked out whilst breaking wash at Parker's prospecting claim. The gross yield from washing 330 loads was 30 lbs. weight.

A block of quartz has been obtained in Griffith's claim studded thick with gold.

Over 500 loads of wash-dirt, from the Hidden Treasure claim, yielded 11 dwts. per load.

LATEST FROM GYMPIE, QUEENSLAND.

GYMPIE, THURSDAY, MAY, 1881.

Three hundred and ninety-three tons of quartz, raised in eight weeks from No. 1 North Phœnix, yielded 3455 ozs. The mine has already produced this year 9034 ozs: 41 tons from the Monkland Reef of the North Glanmire Company gave 239 ozs. Specimens containing 1500 ozs. were got on Tuesday from the Glanmire Reef in the same mine. The Caledonian United start sinking a deep shaft in eight days time.

GYMPIE,—The report for April, of Warden Lukin, of the Gympie gold field, says:—Reporting on this field for the past month, I may say there is little or no abatement of the marked prosperity with which the present year opened. Numerous applications for new ground as claims or gold mining leases continue to be received, and there is not of necessity an idle miner on the field; in fact there is some little difficulty at times experienced in obtaining practical miners at present rate of wages to represent new ventures. In one claim I hear the miners have struck for a rise. On the 5th ult. I dispatched an escort conveying 9189 ozs. 4 dwt. 22 grs., making a total, with the previous escort this year, of 19,335 ozs. 3 dwt. 13 grs. for the quarter. This average, if maintained throughout the year, will almost double the yield of any previous year since 1869. A good number of claims are raising large quantities of payable stone, and our crushing machines are fully and constantly employed. The most noteworthy of the past month is the yield from the North Glanmire Company's mine. From the last two crushings over 3000 ozs. have been obtained, and the mine again ranks as one of the best on the field. The No. 1 North Phœnix Company are reducing a parcel of about 300 tons at the Gympie machine, and although the return is not expected to come up to its late sensational yield, over 1000 ozs. are expected from the present crushing. The company have decided to erect 10 heads of stampers, which, with their present steam-winding and pumping machinery, will form a complete and economical plant for working the mine. The Phœnix proper have also ordered an additional 10 heads. With reference to the new ground recently opened on the Red Hill and other localities, work is being vigorously carried on, and progress is being made. In one or two instances I have granted temporary registration on account of a large influx of water, which the parties are unable to cope with, their present appliances being insufficient. Several are now erecting whims, and one or two are considering the advisability of erecting steam machinery at once. The excitement caused by the heavy finds in No. 1 Phœnix, Crown, and other mines has toned down considerably, and although shares are not changing hands so frequently, a good deal of local investment still takes place, which keeps the share market to its previous standard. On the whole the field is in a very healthy and prosperous condition. A number of substantial business premises and private residences are being erected, manifesting confidence in the permanency and continued prosperity of the field. A list of crushings for the month is enclosed herewith. The revenue for the month is 500*l.*

CRUSHINGS.

	Tons	cwts.	Ozs.	dwts.	grs.
No. 1 North Glanmire	531	0	737	3	0
North Glanmire Company	609	15	1324	13	12
United Smithfield	198	19	233	12	13
Glanmire p. c.	801	4	734	11	13
North Columbia	57	16	140	3	6
Golden Crown	148	12	161	15	0
Phœnix G. M. Company	538	0	641	14	6
No. 1 South Phœnix	59	17	9	14	0
New Zealand p.c. tribute	115	0	38	15	0
No. 1 N. Lady Mary	45	11	32	5	0
No. 1 N. New Zealand	7	12	16	1	0
No. 1 S. New Zealand	25	4	9	14	0
Blink Bonny p.c.	5	10	13	2	0
3 and 4 N. Lady Mary	46	12	15	2	0
Total	3190	10	4763	10	12

NEW QUEBRADA COMPANY.

SIR,—In my hurried letter of last week I had not time to say nearly all I wished, and I, therefore, trouble you with some further remarks. I have been for a long time dissatisfied with the conduct of our directors, who indeed appear anxious to become not only a a board of directors but a board of dictators. They are virtually self-elected, for every vacancy is at once filled up by themselves without in the slightest degree consulting the wishes of the shareholders, a majority at least having to my knowledge been so appointed. And upon the occasion of any director retiring by rotation a statement appears in the report that he offers himself for re-election, and at the meeting the Chairman gets up to nominate him, and another director immediately seconds the nomination, the shareholders being left like a scattered flock of sheep—helpless. To me there appears a great lack of modesty, to say the least, in such proceedings.

In my opinion one new director at least should be appointed every year, as the monopoly which at present exists is not only objectionable but prejudicial. Of course we shall be told that the old member has experience, which the new one would not have. Well, if our directors did much beyond endorsing the acts of the agents at the mines, and really knew much, or anything more than they learn from these agents, there might be something in it. But have any of the directors, except Mr. Ormiston, ever seen the mines? And if they had, how many among them would understand what they saw? The fact is that directorial superintendence of mines thousands of miles away is in most cases little more than a sham, and an excuse for paying a number of gentlemen nice little salaries. I find we have seven directors, who by their united labours have earned us in 1880 a little more than 9000*l.*, at a cost of 3379*l.* for superintendence, and 5557*l.* for commission. What a stupendous result of the exertions of these gentlemen!

To show the value of our directorial superintendence, I need give only two instances. 1. The report of Mr. Darlington as to the disastrous state of the mines in 1877, previous to which they had been described by the directors in the most glowing colours, no doubt honestly as far as their knowledge extended. Ay, there's the rub! 2. To the charge of 5557*l.* for commission. I was going to call it a monstrous charge, but that is too dignified a word, as it is really farcical. This broker, whoever he may be, actually receives a sum more than equal to 1½ per cent. on the whole working of the company. Lucky man! And what a wonderfully clever board of directors, who I daresay think they do not want overlooking. But this is not all, as I find that it is proposed not only to reduce the meetings to one yearly, but also to reduce the number of days for giving notice of any meeting to seven. Dare any director get up and say the proposed alterations of the Articles are for the interests of the shareholders? He would well know that they are intended to abridge their privileges, and for the purpose of increasing and consolidating the powers of dictation already possessed by the directors, and as such it cannot be denied are highly discreditable to them. I believe, up to 1878 or 1879, the board consisted of five directors only. How, or why, the two extra directors were added I do not know, except it was for the purpose of giving two of their friends nice little appointments. Or, perhaps, it was considered that in a multitude of councillors there is wisdom

But I am afraid the wisdom in this case, instead of being increased, has been reduced in proportion to the number.

I beg to suggest, if the directors have the hardihood to press the proposed alteration of the Articles, an amendment be moved, that the proposal be rejected, and in lieu thereof—"That the maximum number of directors be reduced to five, and that they shall furnish the shareholders with the information they periodically receive from their agent or agents at the mines without any unnecessary delay."

I think if we reflect that until last year the shareholders have had not the slightest return for the capital expended, and then the miserable sum of 3 per cent. only, that economy should be practised in every direction, and that the salaries of two directors at least should be saved.—*Camberwell, July* 19. E. DEARLE.

NEW QUEBRADA COMPANY.

SIR,—I quite agree with Dr. Edward Dearle, who writes in last week's Journal, that we get scanty information enough as it is without having the reports and meetings reduced, though half-yearly accounts are of no use. Our engineer, Mr. Darlington, said in his circular of May, 1877, and again in May, 1878—"It is exceedingly desirable to employ boring machinery, by which levels can be driven four or five times faster than by hand, and at two-thirds cost." Yet only now is the first machine at the mines, and that only for the new discovery, which will take 12 months before it touches the lode. Why none for the present workings, particularly as labour is scarce and very inferior?

The smelting has been in work six months, but not a word as to results, or if the royalty question is settled the monthly cards do not mention it. The last dividend is very small; but as the board of mine and railway is practically the same, after the large concessions from the railway to the mine, it was impossible to make the latter appear in a better position than the former, which, owing to exceptional circumstances, lost an amount as large as the dividend paid this year. The amount to be paid by the mine this year is nearly double. Yet the output so far is below last year. If the directors cannot be made to largely increase the output no profit can be made. I believe they are honest, but am afraid their honesty can only be defended at the expense of their intelligence.

A LARGE SHAREHOLDER.

RICHMOND CONSOLIDATED MINING COMPANY.

SIR,—On Tuesday I received a telegram from San Francisco announcing that the Albion Company had succeeded in their suit against the Richmond. I immediately wired to the secretary for confirmation of this important news, and was astounded to get the following reply: "We have no information about Albion or Eureka cases." Such ignorance on matters of vital interest to the shareholders is anything but satisfactory to— D. C.

Dublin, July 20.

CHONTALES MINING COMPANY.

SIR,—I am glad to observe from the last report from this mine that both manager and men are cordially co-operating by working night and day in re-opening the Estrella and Consuelo levels, thus saving much time and greatly diminishing the cost of the necessary dead work previous to reaching the rich ground formerly so little worked and unaccountably abandoned in the Consuelo Mine. The shareholders may, I hope, now look for the receipt of the monthly reports with the same pleasure as in former years when the yield per ton of ore was from 5 to 15 dwts. The plan of opening out the mine is apparently the best that could be adopted, and with the cost of delivering the ore at the mill reduced from 21s. to 3s. 1½d. per ton the shareholders may look with tolerable certainty for good substantial dividends to be commenced during the course of next year. Surely the shareholders who have parted with their shares at 1-16 to ⅛ (if there are any such) as quoted in the Stock Exchange List have little knowledge of the value of their property, or they would undoubtedly have held on for better and more prosperous times which are looming in the future.—*Alnwick, July* 20. T. BRADLEY.

COLORADO UNITED MINES.

SIR,—The elaborate report of the manager, part of which appeared in your last week's issue, clearly shows that he is, and has been, carrying out his intention expressed in February of last year to get the reserves fully two years ahead of developments, and the unavoidable delay in getting the new hauling engine to work simply adds to the already large accumulation. At the meeting last week the chairman said we had a mine second to none on the North American Continent, and not only a mine, but a mine full of ore. The tributers extracted last year ore to the value of about 17,000*l.*; and we have not far to drive before we get under their rich ground, where it is reserved for the company's use. Although so much has been done below, surface improvements have been well considered. We have a capital mill, with buildings, &c., equal to a largely increased output, evidence of which is visible by the fact that the amount paid for insurance on buildings rose from 49*l.* in last to 135*l.* in this year's balance sheet. The Chairman remarked that with the price of the shares the Board had nothing to do, but if, after his expressions (and we must remember he was in the mines a few months since), shareholders choose to sacrifice their property at the present figure, why they can have but themselves to blame.

STOCKHOLDER

HUNGARIAN COPPER COMPANY.

SIR,—The undermentioned reply to a communication from myself, complaining of the paucity of information as to the operations of this company may, perhaps, be of interest to my fellow-shareholders.

Holloway, July 21. H. W. HIGGINS.

Copthall Buildings, July 12.

SIR,—I am in receipt of your favour of yesterday. The works on this company's property are being worked, and progress is made in opening up the various points. We continue to receive from time to time very lengthy and voluminous statements of the operations now and to be carried out; but these tabular reports, although apparently indicative of good progress, are yet not of a shape and character favourable for publication. The directors are now making arrangements for a regular, concise, and lucid report, to be transmitted with a view to such being published in the usual way for the shareholders' information.—W. L. PHILLIPS, Managing Director.

GOOD NEWS FROM NORTH DERBYSHIRE—No. III.

SIR,—I must again thank you for your kind insertion of my last, and in this communication I have still better tidings to impart with regard to the Peak Great Consols. No. 2 shaft has been sunk a considerable distance, and every day brings forth something new to justify all and more than what was expected at the commencement. All my former statements have been found to be perfectly true, and now I think many days will not elapse before the ore is struck, and in the minds of those who have visited the place there is not a shadow of doubt that untold wealth will shortly be forthcoming to the fortunate owners of this valuable property. Whilst feeling such pleasure and satisfaction in this concern, it would be an omission to neglect noticing the letter from your correspondent "Galena," and to unite with him in expressing regret that really good mines should be passed over for want of capital whilst foreign speculation should be so much patronised. It seems almost a mystery that the eyes of the public should be so steadfastly closed to their home interests when most profitable investments can be made. It is not sufficient, and it would be useless, to speak of the thousands of pounds that have been gained by mining in Derbyshire in the past. We have only to look at present works—mines in the hands of private gentlemen, and being so very little known and recognised—that day after day and week after week are turning out their immensity of riches, accumulating year after year, and no signs of exhaustion or failing. I will mention one in particular—Mr. Wass' mine "Mill Close"—still again, "Magpie." In the latter there is the greatest credit due for their untiring energy and perseverance in driving the level from the valley of the Wye to unwater the mine. Seven years have they been driving, and every day we are expecting to hear the good news of the object being attained. So soon as it is under good management it is believed that not less than 150 or 200 tons of ore can readily be raised per month. There are others which I shall be glad to mention in due course. What is now wanting in English mining is life, energy, and capital. It is really astonishing what great results might be obtained with only a very small sum of money.

Whatstandwell, July 19. CORRESPONDENT.

LEAD REPORT.

SIR,—Our market has been rather firmer for the last ten days, and a fair amount of business has been done, but most of the sales were closed on secret terms.—*Newcastle-on-Tyne, July* 20. STOCKS.

SOUTH WALES—THE CWM AVON WORKS.

SIR,—In your report headed Trade of South Wales, in last week's Journal, I observe it is stated that the Cwm Avon Works made large profits under the management of Messrs. Biddulph and Martin, and that afterwards they were in charge of Mr. Struvé. The former of what is stated may be correct, but not so as to the latter, and it is but just to let the readers of the Journal know that after the mortgage on the works had been paid, and the Governor and Company of Copper Miners in England had taken possession of the works it was Mr. Gilbertson and not Mr. Struvé who undertook the management of the works, and under whose management large and regular profits were made. On the resignation of Mr. Gilbertson the board appointed Mr. Struvé as manager, and during the whole of the period the works were under his care large losses were made.

SOUTH WALES.

WHEAL UNY.

SIR,—However much Capt. Rich may feign to be ignorant he cannot deny the fact of his own son being the writer of the first letter, and it would have been more straightforward (as he acknowledges) if the writer had put his name to it. He may consider himself attacked by me when at the same time the attack came from the other side. With reference to the question asked, I can only add that young Mr. Rich asked these questions at the last meeting, and was answered satisfactorily. Had it been any adventurer who was not at the meeting that had asked the question I would have answered him, though asked in a public paper—a most unusual way of asking questions of an agent. If young Mr. Rich (with all his note taking) says that he is ignorant on the matter I will answer him, but he must certainly confess to being very forgetful. With reference to Capt. Rich's remarks about the pitwork (from the 130 to the 172), if they had at all been anything near so good as Jones's clock there would have been very little trouble. I think I may safely say that I had to attend to the working of more different kinds of pumps and pitwork, &c., before I was 23 years of age than Capt. Rich ever saw, but I have never come across such a rotten lot as those in the bottom of Wheal Uny. Is it not very awkward that mid-winter should have come here in December, and in South Condurrow nearly two months later? I think Capt. Rich should look at his own reports before making such statements about mid-winter. As to what was sunk here in dry shafts and winzes is not a question that has been raised. I repeat for general information as follows:—The mine was sunk from Aug. 26, 1870, to Aug. 30, 1880, just 10 fms., and yet Capt. Rich never found any difficulty in sinking. During the same time the reserves were drained to such an extent that 3055 tons of tin were sold—an average of 305 tons of tin for each fathom sunk. Now his argument is that the mine in sinking gets poorer—this has to be proved. Several remarks of his are so near to nothing that there is no necessity to reply. His boring machine invention, for instance, has just appeared for the first time. He should recollect what he said at a meeting subsequent to his resignation. His statement before the meeting on Aug. 30, 1880, that he had sunk the mine 20 fms., or 30 fms. deeper than it was 10 years ago, does not correspond with his books. I would advise him in future to be a little more careful. His statements about East Uny show him again very seriously at fault. The two points (he speaks of as one) valued at 40*l.* and 10*l.* per fm., are over 80 fms. apart, His statement that notwithstanding these rich discoveries there has been no tin nor copper sold yet is again wrong. I am glad to see that Capt. Rich's potential energy has at last become kinetic, but hope he will not be so seriously at fault when he writes again. I shall be glad to explain anything asked by any adventurer either by post or otherwise, and have always done so in every mine I have worked. If, therefore, Capt. Rich or his son (whoever may have the right) will come to the next meeting they can have every explanation required. HENRY EDDY.

Wheal Uny, July 19.

CORNISH MINING, AND MAGISTRATES

SIR,—The Inspector of metalliferous mines in Cornwall and Devonshire appears to us to have gone out of his way to attack the Cornish magistrates for what he considers undue leniency, or what may be termed partiality, in dealing with offences by mineowners for not taking the necessary precautions to ensure the safety of the miners. This did not escape the notice of Mr. Macdonald, M.P., who called the attention of the Home Secretary to the subject a few days since, pointing out the allegation that the magistrates who were interested in mines inflicted inadequate fines, which he looked upon as a most serious offence. He stated that as regards coal mines the case was altogether different, for with respect to them it was enacted that persons at all interested in such could not act in cases coming before magistrates, but as regards metalliferous mines there was no such enactment, which was done deliberately, because it was considered in Cornwall and other places, where those mines happened to be, it would be impossible to find any magistrate not interested in them. The charge was that magistrates in Cornwall imposed sums of 5s. and smaller sums for certain offences which the Inspector considered were not sufficient in amount. The Home Secretary said it was assumed that the magistrates, though interested, would not allow that to interfere with the administration or the law, and if it were found that they were acting otherwise some remedy should be found, and considering the matter worthy of further inquiry he had called for an additional report. It is not often that magisterial decisions reviewed by an interested party are considered of sufficient weight to call for the interference of the Home Office, which in the most serious cases may be looked upon as the last criminal Court of Appeal. But here we have a gentleman, the paid public prosecutor, finding grave fault with the tribunal whose aid he invokes, so putting himself forward not only as the prosecutor but the judge, as well as to the amount of punishment which should be inflicted. It is said that some of the magistrates are interested in the cases that come before them as mining offences, but surely the same may be said with respect to the Inspectors of Mines who prefer the charges. As a rule, prosecutors and defendants view penalties inflicted from opposite sides, and whilst the former may consider that the magistrates have been too lenient in cases in which they are interested, the other side, in all probability, will be of opinion that they have received no mercy, if, indeed, they do not believe they have been harshly dealt with. If prosecutors were allowed to fix what in their opinion should be the penalties imposed for certain offences, their decisions, I need scarcely say, would call forth general indignation, and something more than legislative interference in the first instance. Yet this actually appears to be the position of the Inspector of Mines with respect to the charge he has brought against the magistrates in Cornwall. Gentlemen of position, unbiassed as we believe they are in their magesterial capacity, they do not see every case that is brought before them in the same light as the prosecutor does—and it is desirable for the fair administration of justice that they should not do so; but I feel sure that where severity is not called for, and where the offences may be of a comparatively trivial character, they hold the scales of justice evenly balanced between the contending parties.

In the coal mining districts, where persons in any way connected with collieries are not allowed to take part in the adjudication of cases in which mine owners are concerned, the greatest dissatisfaction is expressed at many of the decisions come to. In some instances we have known a man to be sent to prison for three months for tampering with his lamp, whilst in another district the same offence has been visited with a fine of 10s. These are uncertain and unequal sentences undoubtedly, and one would think called for revision, yet we never hear of fault being publicly found with the magistrates or appeals made to the Home Secretary, even by the paid officials of the working miners, or yet by Mr. Macdonald himself, who is so keen as to all that relates to the body which he is connected with, and of which he may be said to be the chief. Magistrates take different views as to the cases that come before them, but those views are frequently modified by consultation with their brother magistrates, so that the opinion of an individual does not settle the amount of penalty to be inflicted in any case. But the Inspector of Mines for Cornwall sets up his individual opinion against that of a considerable body of magistrates, and what appears to us as least justifiable is that he is one of the principal parties concerned, and thus assumes the functions, or at least desires to do so, of prosecutor, judge, and jury. Offences against the Mines Act, in many instances are of a trivial character, and often the result of mere thoughtlessness, but not endangering life or limb, and the object of prosecuting should be to see that the Act was complied with, and not so much to obtain a large pecuniary fine. We are, however, glad to find that the Home Secretary has ordered a further enquiry to be made, the result of which we believe will be to prove that the magistrates have not shown that one-sided partiality with which they have been charged in the carrying out of their onerous and at times by no means pleasant duties—duties which can scarcely be expected in every instance to be satisfactory to the opposing parties.

MENTOR.

MINING SHARES, AND MARKET OPERATIONS.

SIR,—In the letter of "Practical Miner" in last week's Journal, mixing up American mines by way of comparison with Indian gold mines, he touches upon a company with which I have been associated for some years as a shareholder, and I would venture to offer the following comments. In his letter he refers to "gold mines rigged up expressly for the English market," and in his list of companies *inter alia* mentions the Eberhardt as one of such "rigged" concerns. Now, it appears to me that your correspondent should weigh well his utterances before committing them to paper, for as a fact this mine was purchased for some 150,000*l.*, and ore to the value of upwards of 700,000*l.* in about five or six years has been taken out therefrom. The concern, too, is far from worked out yet, and as one having some knowledge of the property I am prepared to challenge your correspondent to quote another company whose shares may be purchased at the present price to compare with the "rigged up" Eberhardt as a venture; in fact, at any moment the shareholders may fully expect to hear such news as will, I feel certain, warrant my giving effect to the above statement and in setting forth such challenge. I trust my fellow-shareholders will in no way be cajoled into parting with any of their holdings at the prices quoted for the past few weeks, as I feel assured it is only a trick on the part of the "jobbing" gentry to get shares in their hands for the purposes of their own "little game." H. W. HIGGINS.

Windsor-road, Holloway, July 21.

MINING IN LLANARMON, AND LADY ANN MINES.

SIR,—I am obliged to your North Wales Correspondent, as he seems anxious as to my welfare and the progress at Lady Ann Mines in particular, and in mining generally in the Llanarmon district. With respect to mining, I may say here it would afford me very great pleasure indeed, and others that I know, to have an opportunity to meet your versatile Correspondent, and spend a day with him in and about Llanarmon; but the difficulty is how to arrange the matter. I have not the pleasure of knowing either his name or address, and I conclude he is the same with me. I can, however, name a time when I shall probably be in Mold and neighbourhood—from Aug. 6 to Aug. 12, and I have no doubt if your Correspondent would drop a line to Capt. W. Francis, of Northop, we should be duly introduced to each other. As to the Lady Ann Mines, I am exceedingly pleased to say that the work there is progressing nicely, as your Correspondent would see by letters and reports of last Saturday. I have a letter to-day direct from the mines yesterday confirming all the favourable appliances of last week:—"The vein is 2 ft. 6 in. wide, with three spots of lead, with heading near the roof. The heading and the hanging-wall look very well.' I trust I may not be long before I have the pleasure of a day's company with your Correspondent amongst the mines and miners of Llanarmon.—*July* 21 ENQUIRER

REPORT FROM DERBYSHIRE AND YORKSHIRE.

July 21.—Lead mining in Derbyshire has undergone but little change of late, everything appearing to go on in a perfectly uniform manner. It has been said, however, that some of the mines are about to change hands, and to be energetically worked with plenty of capital, which is the great thing required For it may truly be said that what is wanted is less mines and more money to carry on those that are capable of giving good results, in the shape of a fair profit for the outlay. Iron mines are not thought much of now, owing to the large available supplies in Northamptonshire, which the Derbyshire ironmasters continue to draw upon heavily. The iron trade has been looking better of late, but consignments of Derbyshire pig have not increased much for Lancashire and Staffordshire, but that to some extent is due to the low price at which some other descriptions are being sold. In finished iron there has been no material improvement, and the mills for a considerable time past have been anything but busy. Most of the foundries have been working well, this being usually a busy time for pipes, whilst there is a steady output of pumps and machinery. There has been no decline as regards the make of steel at the works at Dronfield, for the demand for rails appears to be as large as ever, the only drawback being the low price at which orders have to be taken, owing to the competition on the part of producers who are nearer to a seaport, and have little or no railway rate to pay, which is a great advantage. The coal trade of Derbyshire has become quiet so far as regards household sorts, and there has been a marked decline in the tonnage sent to the Metropolis from Clay Cross, Eckington, and several other collieries, and no improvement can be expected so long as the present weather continues. Prices are low at the pits, but to the consumer in the pits they are rather higher than they were this time last year, but they are likely to come down a little lower. Steam coal has gone off better of late, and a good deal has been sent from two or three pits to Hull who have the advantage of the canal and a railway going to that port. More would be done were there many collieries at a moderate distance from a seaport, but such is not the case. Some time since Mr. Thompson, of London, brought forward a scheme for conveying coal from the inland districts—Derbyshire, Notts, and the West Riding—by railway to Boston, and thence from Boston Deeps in large swift-going screw steamers to the Thames; but nothing has been heard of it for some time. Could it be adopted it would make the fine inland steam coal, most of which is a great deal harder than the Welsh or North Country, and therefore particularly suitable for marine purposes, and at the same time it would have led to a reduction in the price by the competition that would be the result. It is, however, to be hoped that something more will be heard of Mr. Thompson's scheme, and that before long.

In Sheffield trade continues good in nearly all branches, more especially as regards mill material. There is considerable activity in the production of the composite armour-plates for two vessels now in course of construction by the Admiralty, and orders, it is said, are being received for other Governments for them. This may be looked upon as peculiarly a Sheffield speciality, and replaces the one that also belonged entirely to the town—that of iron armour-plates. Some of the latter were as much as 24 in. thick, but the new plates, consisting of about 5 in. of steel and a like thickness of iron, are superior as regards resisting power and durability. On ordinary plates for boiler makers and ship builders a fair business continess to be done. Producers of Bessemer continue to be well employed, a large proportion being made into rails. America continues to send good

orders for cutlery and hardware as well as heavier material, and our colonies are also contributing largely to the production of steel goods. The cutlery houses are now doing well more particularly in the better class of table, pocket, and penknives. Makers of sheep shears have been doing well, and the same may be said as regards the file and saw branches. Foundry material is in better request, especially as regards pipes, palisadings, cooking ranges, spouting, and stoves. There has been no change in the state of the raw iron trade, the output having been kept up to the average, but stocks have not sensibly declined of late, there being a greater run on hematite pigs.

In South Yorkshire the coal trade is in anything but a satisfactory state, there being comparatively little doing in the soft qualities. At one place the men have been asked to submit to a reduction of wages, and a strike was threatened but averted. Steam coal goes off rather freely, but there has been no material advance in the charge for it. A great deal of dissatisfaction is expressed at the decision come to by the Railway Commission with respect to the Denaby Colliery, situate about five miles from Doncaster. For a great many years a uniform charge was made for all collieries to Doncaster, the grouping being for a distance of about 14 miles. The Denaby being by far the nearest is to have a special rate, what may be called a mileage rate, so that the owners will be able to sell at a lower price to the Hull and other shippers than many other collieries working the same seam.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

July 21.—At the meetings of the trade this week coal averaged from 5s. 9d. into boats for Cannock Chase forge sorts, up to 7s. 6d. and 8s. for Dudley forge qualities. Furnace sorts ranged from 8s. to 9s. Cokes of Welsh and Derbyshire makes were slightly weaker, but without quoted change. Pigs were reported to have sold freely at the quarterly meetings, and during the two weeks preceding those gatherings. Prices were, therefore, strong at 60s. to 65s. for best hot-blast native sorts, 2*l.* 10s. for part mine, 2*l.* to 37s. 6d. for cinders, and 3*l.* 5s. for hematites. Finished iron was strengthened by the action of the New British Iron Company, who have just formally intimated that their bar price will remain at 7*l.* 10s., hoops at 8*l.*, and plates and sheets at 9*l.*; this is 10s. higher than the bulk of the other best firms.

The existing wages agreement between the Cannock Chase miners and owners will expire on August 12, and representative masters and men have been holding a conference as to a renewal. At present the minimum under the scale is 2s. 3d. per day, and this is what the men are now receiving; but they want the minimum to be increased to 2s. 6d., and the standard selling price of coal reduced by 1s. Nothing, however, has been decided. The masters say that in the present state of trade they cannot see their way to sanction any increase in the scale.

A seam of good coal, 7 ft. thick, has been found at a depth of 70 yards at Bewdley. Mr. W. Baxter, of Hednesfield, has recently taken over a shaft that had been sunk to a depth of 60 yards, and then abandoned owing to the come of water. The new proprietor fixed up fresh machinery, which included powerful pumping apparatus, and after clearing the shaft and sinking about 10 ft. further he came upon the seam. The find will afford fresh and welcome employment for Bewdley and the district.

A Quarterly Meeting of the South Staffordshire and East Worcestershire Mining Accident Fund was held in Wolverhampton on Wednesday. Amongst six colliers' widows and their families 30*l.* 10s. was distributed. The Secretary stated that the income of the fund —interest on invested principal—was 130*l.* per annum. The balance of the Hartley Colliery Fund was stated to be 30,584*l.*, and 70 persons were said to be still receiving payments from it. The Secretary was instructed to write enquiring whether there was any likelihood of an early division of the fund, since when that did occur the South Staffordshire Fund would be entitled to a considerable contribution.

A petition for liquidation has been filed on behalf of Geo. Crowther Ryland, Wednesbury-road, Walsall, carrying on business as the Manners Coal Company, colliery agent and coal merchant. The liabilities are estimated at 2300*l.*; assets not yet known.

The customers of the New British Iron Company have received circulars giving their prices for the new quarter. These show that the proprietary maintain their refusal, first manifested three months ago, to act with the majority of the marked houses who reduced prices 10s. per ton. The company's bars are quoted 7*l.* 10s., sheets and plates 9*l.*, hoops 8*l.*, angles 8*l.* 5s., and Tees 8*l.* 10s. It is understood that Messrs. John Bradley and Co.'s quotations are also 10s. higher than the standard regulated by the Earl of Dudley.

The Mid-Cannock Colliery Company (Limited), it will be remembered, went into voluntary liquidation in 1880. Its business since that time has been carried on by the liquidator, and the results of such working have satisfied the shareholders that the properties and business of the company are exceedingly valuable, and have led them to decide upon a reconstruction of the company and the raising of mortgage debentures of sufficient amount to provide for the efficient working of the concern and payment of its liabilities. The Master of the Rolls has made an order sanctioning a scheme which has received the unanimous approval of the shareholders, the mortgage debenture holders, and the ordinary creditors of the company. In pursuance of that scheme, and as the first step to be taken thereunder, a new board of directors has been appointed, and resolutions have been passed sanctioning an issue of 2000 mortgage debentures of 20*l.* each, carrying interest at 10 per cent. per annum, to be secured by a trust deed or otherwise, as the board may think fit, upon the undertaking, and all the property and assets of the company. Under the scheme the old debentures will be cleared off, and the old debenture holders, with the shareholders, have agreed to take up 1300 of the 2000 debentures. The directors now offer 700 debentures to the public, and it is to be hoped that they will be promptly subscribed for.

REPORT FROM NORTH WALES, SALOP, AN CARDIGAN

July 21.—The recent trial of the dressing machinery at the Court Grange Mine for the purpose of separating the gold from a sample of quartz brought there for the purpose resulted in successfully showing that a system of dressing machinery, based upon the principles of that employed for dressing lead, could be applied for dressing large quantities of gold quartz and separating the gold. According to the official return, no gold was raised in England and Wales during 1880.

We are glad to hear that at the North Cardiganshire Mines, formerly known as the Talybont Mine, there has been a fresh and valuable discovery of ore in the works now being conducted by the new company. We hope that the machinery, which has been idle for so long, will soon be thoroughly overhauled and set to work again.

At the Mona Mine, in Anglesey, work is being briskly carried on, and there seems every prospect of their labour being still more richly rewarded.

The laying of the first stone of the great Verniew embankment of the Liverpool Waterworks at Llanwddyn was necessarily accomplished on Thursday, the 14th, by Lord Powis, in the presence of vast numbers of spectators.

The embankment, which is to be made of stone quarried in the neighbourhood, will be of a total length of 418 yards, and the total height from the bottom of the foundation to coping of parapet will be 139 ft. The lake formed by this embankment will stretch up the valley for 4¼ miles, and will have a surface area of 1115 acres, while it will contain 12,000,000,000 gallons of water.

The important part as regards the mining interests, is that the em bankment will require about half a-million tons of stone, while the aqueduct works will necessitate the formation of a total length of about 4 miles of tunnel 7 ft. in diameter.

For the accommodation of the men employed on the works the Corporotion have already erected barracks, while a workman's hall, or cocoa room, has been built for their use. This latter, which is a commodious wooden structure, was used on the opening day as a banquet room, and then seated some 180 guests. We hear that the Liverpool Cocoa House Company are about to take to it for the future.

It seems as though the promoters of the present Llangynog railway scheme were thoroughly in earnest, for we find that there are detachments of surveyors busily at work in the Tanat Valley. That we heartily wish this scheme success our previous remarks in these columns will show, for not only is it deserving of it from a financial point of view, but also because of the immense good it will do to the trade and mining industries of this much deserving valley.

All those interested in mining should obtain a copy of the report of Her Majesty's Inspector of Mines for this district, which gives all the mining returns for 1880. As regards North Wales, Salop, and Cardigan, we find that 4273 persons have been employed underground and 2775 above ground during the year 1880, or a total of 7048 in the metalliferous mines of the district. The average number of deaths from accidents has been at the rate of 1 in 630 persons employed. A satisfactory point is that, compared with 1879, there has been an increase of 10 per cent. in the persons employed, while the production so far as regards copper and zinc shows an increase, lead being less by about 1000 tons. The amount of mineral dressed or undressed sold or treated during 1880 was—Copper, 4414 tons 14 cwts.; lead, 23,104 tons 11 cwts.; zinc, 12,693 tons. With regard to the individual output of the mines, the production of each is given, and includes some returns, which we fully expected to have seen larger and more important.

REPORT FROM CORNWALL.

July 21.—We are once more in the region of the "ups," with a substantial advance in the figures for sundry mine shares, and with large hopes of a considerable advance in tin within the next six weeks or two months. Of course it is quite possible that hope may he again deferred, but that the prospect is both encouraging and healthy there can be no question. Whatever the immediate course of events, however, may be, no change can reasonably be expected until after the next Banca sale. In other directions the outlook is not quite so satisfactory. There is certainly a fair amount of business doing, but we have not had anything like that revival in trade which was so confidently expected, and the harvest prospects are by no means so encouraging as to give very much hope. Still we are not likely to fall back.

Dr. Foster, the Government Inspector of Metalliferous Mines, has got into very hot water. The plain spoken way in which he referred to the action taken by the local magistrates upon offences brought before them under the Metalliferous Mines Acts (as quoted by us the other week), has brought him under the notice of the House of Commons. Mr. Brydges Willyams and Mr. A. P. Vivian have both been "down" upon the Inspector, and Mr. Macdonald, following the inspectorate lead, has been "down" upon the magistrates. On the one hand the Inspector has been called upon (non-officially of course) to resign or be ejected; on the other, Mr. Macdonald wants to know if the Home Secretary cannot make a clean sweep of the magisterial benches in Cornwall of all magistrates affected by mining interests—which would be a very clean sweep indeed. We have certainly by no means heard the last of the business. Indeed we are only just at the beginning, and in all likelihood Dr. Foster, too, will have much further to say. At present it is tolerably clear that he has the sympathy of the Home Secretary, for Sir William Harcourt, in his reply to Mr. Willyams and Mr. Vivian said—"The Inspector does give the facts in his report upon which he bases his opinion. I should be detaining the House too long if I were to go into them, but I may just mention one as a specimen. He cites the case of Wheal Grenville. In June, 1879, he found that offences against the Act ware being committed and remonstrated, and caused notices to be served on the agents. He returned about six months afterwards, and found that no proper fences had been put up about the shaft to which he had called attention. The fine imposed was 5s. Then there is another case—Wheal Basset. A man was killed in April, 1880, by a fall of the casing of the mine. Proceedings were taken against the agents for the defect which caused his death, and the fine imposed was 10s. There are several other cases in which the fines were 2s. or 2s. 6d. for a breach of the Act. Upon these facts the Inspector has made his statement."

There is no fear, however, that the matter will not be thoroughly discussed, because Sir William Harcourt added that it deserved serious enquiry, and that he would call for a report from Dr. Foster upon it. There can be no doubt the whole business is far too serious to remain where it is; but in the present state of affairs this is certainly not the time to express our opinion.

We cannot help thinking that Capt. Southey should have said either less or more at Wheal Jane account. He might had he so chosen resigned without giving any reason—at any rate, in public; but the reason being given, and one of so very unpleasant a character, it would have been well to be more explicit. So many attempts have been made of late to cast discredit on Cornish mining, and so much has been done (especially in regard to the formation of new companies) of which it is impossible to approve, that we should not have any stigmas of an unnecessary character cast upon it, and the charge made by Capt. Southey that he had been dictated to as to how he should make out his report is so serious that we really ought to know the circumstances. We can very well understand that no light matter would make Capt. Southey resign a position which he has filled so long and so well, but when he has discharged his duty to himself there remains, in our view, a further duty to the adventurers and to the public, which is not fulfilled by the simple creation of an uneasy feeling. Cooked reports are such dangerous things that people ought not to be kept in ignorance of the quarter whence they may be expected. Capt. Southey's words only rouse suspicions, which may or may not be wrongly directed, and which ought to be made certainties.

TRADE OF THE TYNE AND WEAR

July 21.—The shipping season is now in full swing; fine weather has prevailed in the North Sea for some time, and the arrivals of steamers and sailing vessels has been large, consequently the shipments of coal, coke, iron, chemicals, and all the staple products of the district have been on a large scale. The steam coal works north of the Tyne and in the Blyth and Amble districts have been fully employed during the past week, and this is expected to continue for some time to come. The prospects of the steam coal trade are certainly very cheering at present. The Whitley Colliery, which has been closed a short time owing to the bad trade and other adverse circumstances, may possibly be reopened should the trade continue to progress as it has done lately. The shipments of coal and coke at the Tyne Dock have been very large of late; taking the week from the 7th inst. to the 14th the total shipments were 110,000 tons, which are considerably above the average. On Tuesday in last week 23,000 tons were exported from the dock; the largest quantity in one day since the opening of this great shipping place. Although the coal trade in Durham has been considered so bad this year, and prices have not been generally remunerative, it is evident that the output of coal and coke is still being increased. The return of coal and coke shipped at the Tyne Dock for the first half of the present year has been made up; it might have been thought that looking at the long winter in the Baltic they would be short compared with the first half of 1880, but the contrary is the fact. There is an excess of this half over the corresponding half of last year of 15,000 tons. There has been a great increase in the shipment of coke at the docks during the past two weeks. The exports have been to the Baltic, Spain, and the Mediterranean. The coal trade, on the whole, especially steam coal, is improving; and although no great advance in prices has yet been secured, there is a rising tendency. The best steam coal owners are standing out for an advance, but merchants at present resist this movement; should the demand continue, however, higher rates will shortly be got.

The Seaham Colliery Explosion official report states that after all the examinations made by the officials, mine inspectors, and engineers called in, they had not been entirely successful in determining exactly the precise point where the explosion took place. It also alludes to the important experiments conducted by Professor Abel for the purpose of ascertaining the properties of coal dust. It states that if the views of the managers as to the seat of the explosion are correct, it affords another proof of the extreme danger of explosion from the Clanny and Davy safety-lamps. It also states that if the other views are correct it shows the urgent necessity of prohibiting the firing of shots when any large number of men are underground. With respect to safety-lamps, the explosion does not in our opinion prove anything against their safety; as to the firing of shots, it is evidently hazardous to continue this practice when a large number of men are engaged in coal getting in a fiery mine, and it has also, we believe, been shown by Mr. Dickinson, the Chief Inspector of Mines, that this practice is opposed to the provisions of the Mines Regulation Act. On the whole, the investigation into the cause of this peculiar explosion, like most other enquiries of the kind, are singularly barren of any practical result. The peculiarity in this case is the fact that appears to be admitted on all hands that the explosion occurred at some point at no great distance from the shafts, and in the intake airways. A very remarkable and rare occurrence. It would certainly have been more satisfactory if the point where the explosion took place could have been clearly ascertained, and the source of the gas also defined. There is no doubt that gentlemen of the legal profession possess many advantages; they are best able to sift and weigh and sum up evidence, but in a case of this kind they labour under the serious disadvantage of having no technical knowledge of the subject.

In the Iron Trade there has been a more cheerful feeling during the past week, although the quarterly meeting was quiet. The tendency of prices in the North of England has been higher, though pig-iron has fluctuated from day to day with the Scotch market. There have been some sales at 37s. 3d. No. 3—the highest figure that has been touched for some time past. Manufactured iron has also advanced 2s. 6d. per ton during the week. With regard to the production of iron, no arrangement has yet been made with the Scotch masters amongst themselves, but the make at all events will be reduced a little by furnaces being stopped for repairs. There is no doubt a growing demand for crude iron for shipment and also for local consumption, so that it is expeeted that stocks will not be increased much during the summer. With the advent of winter, when shipments will be reduced, stocks will certainly be increased again unless furnaces are put out. If prices keep below 38s. some of the outside furnaces cannot earn profits, and it is probable that some of them will be put out without concerted action. More enquires for manufactured iron have appeared, and both bar and plate makers are more full of orders. They have in some cases considerable contracts on hand; for bars 5*l.* 12s. 6d. is asked; angles are 5*l.* 10s.; shipplates, 6*l.* to 6*l.* 2s. 6d. Bridge builders are very busy, and axle and wagon makers are well employed. Iron shipbuilding keeps very brisk. Warrants are about 38s. No. 3, and Connall's stocks have increased 1202 tons on the week, being now 181,544 tons.

MINING PLANS AND MINING DISASTERS

The necessity for having accurate and reliable plans of mines has been fully illustrated in the case of Mr. ENOCH PERRIN, the lessee and manager of the Lilydale Colliery, who has just been committed at Hanley to take his trial for manslaughter. In the early part of May several men were engaged in carrying levels towards the north and south parts of the mine. One of these was taken a considerable distance, whilst in two others, which were not driven so far, it was found that there was water near to the places. Still the men kept advancing over the levels, notwithstanding the warning given, and the result was that the water burst into the mine, causing an explosion and the death of eight men. The defence was, that Mr. PERRIN believed that he had 42 yards of coals between him and the water, from the plans on which he placed every reliance. Inaccurate plans have cost a heavy loss of both life and property in many of our mining districts, but even with them there are certain safeguards that should be adopted under any circumstances when driving towards water in old workings. One of these, laid down by Act of Parliament, is that where a place is likely to contain a dangerous accumulation of water the working approaching such place shall not exceed 8 ft. in width, and these shall be constantly kept at a sufficient distance, not being less than five yards, at least one bore-hole near the centre of the working, and sufficient flank bore-holes on each side. It is also required by the Act that where men are working in any place where there is likely to be an accumulation of gas only locked safety-lamps shall be allowed. At the Lilydale Colliery, however, they were approaching old workings likely to contain gas as well as water, yet naked lights were used. Where ordinary precautions are taken there should be no difficulty or danger in connection with water in mines, and those precautions should be familiar to miners and managers. Even in the absence of acccurate plans, those having the direction of work going forward in the direction of water should be acquainted with the lithological character and properties of the rock dividing the surface or underground from the places of the mine in progress. Exploring drifts should be carried in the districts where the water might be be expected to be met with, with bore-holes in advance, the length of the holes depending very much on the tenacity and texture of the material being excavated, and the water can also be supported with strong and durable dams when it is to be kept to the rise of the working parts of the mine. When the work extends under the sea or river it is of the greatest importance that the plans of all underground operations should be properly kept, and every excavation accurately registered, so that when the mine is worked out and filled up with water, as is the case in most instances, the surveyor of a neighbouring mine may, with some degree of confidence and certainty, direct the workings of it to a certain point in the direction of the drowned-up mine, and thereby save all the expense and anxiety of blundering into the regions of the unworked mineral only known to be there in certain quantities by the recollections, always unreliable, of old miners, or traditions where water may be expected from an adjoining mine. The thickness of the mineral to be left as a barrier against the ingress of water must depend in a great measure on the thickness of the vein and the strength and fracture of the minerals, as well as on the kind of stone forming the roof and floor.

If these consisted of broken shale, with threads or veins or clay, the water will generally be found to percolate through a considerable thickness of barriers, but should they consist of hard grits or other rock the quantity of mineral left between the mines need not be so great, and a barrier of some 30 or 40 yards is commonly left between the workings of extensive mines. Where water has to be kept in its place, and where its pressure is likely to be very great because of the quantity and its vertical height above the place bored the greatest care is necessary. Where borings have not been effectual the best thing to do is to build a dam, which should be placed in a narrow spot where the roof, floor, and sides were free from faults and the rock itself sound, for should the water find its way into the rock above or below the dam it would in all probability very soon render it useless by causing the roof to break and in all probability the floor to heave. To those who have not had to encounter an outburst of water, or where it has percolated, the method of fixing a dam may be of some interest. According to a high authority we are told that when the seam is being put in it is necessary to have three metal pipes built in with it, one about a foot from the bottom, sufficiently large to allow the feeder of water to pass, or if the feeder be very large two may be preferable, and a pipe an inch in diameter may be placed near to the top, so as to allow of the exit of any gases which may be confined, so that the pipes would materially ease the pressure on the dome after it was finished. After the sides, bottom, and top have been accurately dressed a layer of tarred flannel may be placed next to the stones or mineral, and the pieces of wood built up, until the whole is closed up, after which the wedging is commenced on the outside, with fir wedges 12 ins. long, 3 ins. broad, and 1 in. thick at the head. After these have been driven in at the joints, sides, and round the pipes other wedges are driven in of diminished size, as long as they can be inserted, an iron chisel being used to prepare places for their reception.

After the wedging is finished the workmen drive the plug into the pipe through which the water has been flowing. A dam of this de

scription—6 ft. square and from 6 ft. to 8 ft. thick—is able to resist a pressure of from 50 to 100 fms. of water. When a quantity of water may be expected in workings to the rise of a shaft the mineral to the dip should, if practicable, be worked first, so as not only to make standing room for the water, whence it need not be taken, but also to prevent the expense of hauling or pumping water to the shaft. In conveying water along levels below which there are any working places, and into which places are holed from the level, great care is necessary lest the water should find its way down the places instead of keeping its course in the direction of the level pipes, or wood boxes are generally used in such cases where the water is conveyed past the holings to the dip, and clay dams sufficiently high to keep the water in its course. These precautions will be found necessary in encountering water, and at the same time much can be effected in preventing disastrous consequences by employing practical and experienced men. At the same time it cannot be too strongly impressed upon mine managers that there should be accurate plans and surveys, carefully registered, at all times available, and that there should be a knowledge of the character and properties of the rock separating the working places from the water to be encountered, whilst boring should always be resorted to where it is suspected. With such precautions as we have pointed out water in mines need not be feared, and had they been carried out in the case of the Lilydale Colliery the explosion at that place would not have taken place, and the owner would not be placed in the position he is in at the present ime.

Meetings of Public Companies.

SIMONS' REEF CONSOLIDATED GOLD MINING COMPANY.

The statutory meeting of shareholders was held at the offices of the company, Cannon-street, on Thursday,—

Major G. B. KITSON, in the chair.

Mr. F. S. MEIKLEHAM (the Secretary) read the notice convening the meeting.

The CHAIRMAN said: Gentleman, in compliance with the statutes of the company we have called this meeting, but I think it is almost needless to explain that it is a purely formal meeting at which there is no business to transact. The only thing is that, as you, gentlemen, have taken the trouble to come down, it may interest you to know what we have to tell you about the property. I shall be happy to give you a general idea of it, and then to answer any questions that you may wish to put. In the first place, I believe this is the largest gold mining property in India, and from all the accounts we have received from most reliable sources, we have every reason to believe that it is one of the most valuable. We are in this position, that we have arrangements with another company—the Carta Para Company—for working one of the estates, and we intend to retain one other property in hand as a gold-mining undertaking. The rest of the property requires no expense whatever to work, for our intention is simply to sell it in section and estates as we have the opportunity of doing. We are in this happy position, that we can assure you most positively that we have got our title deeds in our own possession, and that they are beyond all doubt, and as soon as we have held this meeting, and have been able to make our arrangements, it is our intention to send gentlemen out there competent to make a general exploration of the reefs which have been already tested, and then to advertise the estates for sale in either large or small sections. I am sorry that the meeting excites so very little interest that we have not the pleasure of seeing a larger number of shareholders, but I hope that at our future meetings, when we have really some business to report to you, we shall have a larger attendance. I think that is all I have to lay before the meeting, but if there are any questions on any particular point I shall be most happy to answer them, or afford any additional information in my power.

The CHAIRMAN, in reply to a question, said: We have leased one portion of the property to the Carta Para Company, who have their capital well subscribed, and they are going to work on their own responsibility, the consideration being that they give half their profits to the Simons' Reef Company, so that we have not to find money to work that portion of the property. With regard to the rest of the property, it is our intention to sell it all except one estate: but, of course, if later on the shareholders should think that it would be more profitable for us to work the property ourselves we should defer to their wishes; but those are our present ideas. We are in a position at any moment to commence operations.

A SHAREHOLDER: I am sorry there are not a larger number of shareholders, but I take it that they have such confidence in the board that they know everything will be carried out in the most satistactory way, and, therefore, that there is no occasion for their presence, as this is merely a formal meeting to comply with the Act of Parliament. I suppose the object of the company is to be a sort of mother company, disposing of sections of the property, as you have just told us, as opportunity crops up.

The CHAIRMAN: That is so.

A SHAREHOLDER: Therefore I suppose this company will not work any portion themselves at all, but that we shall really simply sell the property in parts, and that the shareholders will have the profit from the sales.

The CHAIRMAN: You will observe by the prospectus that we reserve the right to one portion of the property—the Glen. That will, of course, depend on the results of our explorations there, and if we could advantageously work it. If we find it more advantageous to let somebody else work it we shall do so. We expect good returns from the washing of the Carta Para Company—we find the property, and they the capital.

A SHAREHOLDER: I think it is a very satisfactory arrangement indeed.

The CHAIRMAN: We have the largest and one of the most valuable properties in India, without any outlay or indefinite amount of capital to work it.

A SHAREHOLDER: Who has the rights to the surface lands you hold?——The CHAIRMAN: We have.——The SHAREHOLDER: And to everything growing on it?——The CHAIRMAN: Yes.

The SHAREHOLDER: I see there is a portion of it under coffee cultivation; is that the property of this company?——The CHAIRMAN: Yes; we have the surface and mineral rights.——The SHAREHOLDER: It is not mentioned in the prospectus; and, therefore, I asked the question.——The CHAIRMAN: It is so, nevertheless—in fact, a portion of the Carta Para estate is planted with coffee at the present moment. But of late years coffee planting has not been a very profitable thing. Of course, if we cleared the land for coffee cultivation it would represent some capital in that direction.

A SHAREHOLDER: Is the property freehold?——The CHAIRMAN: It is equal to freehold. We have a 99 years' lease, and an engagement to renew for a like term if it is claimed.

ASHAREHOLDER: There is one matter I should like to mention. It appears that you have not allotted the whole of your shares. Do you propose at a future time to issue your other shares or allot them at a premium?——The CHAIRMAN: That is a question I don't think I can answer very positively at the present moment.

A SHAREHOLDER: What I want to know is if the present shareholders in the company will have the opportunity of taking them before they are issued to the general public; I suppose that would be so?——The CHAIRMAN: I think it would be only right to do so, and we should be very pleased to do so. Our position is so exceptional at the present moment that I don't like to say much about it to you. We have the property on very easy terms of payment. We have no money to spend. All we have to do is to pay for it at times, when we sell a property the proceeds go towards paying for the whole of the Simon's Reef property; and therefore if we issued all our shares to-morrow I don't know what we should do with the money, except that we should have the capital to enable us to pay off at once the purchase-money for the whole of the estate, and we should be a little more independent. We do not think this is a very favourable time to issue shares to the public; but at the same time if the shareholders or their friends would like to take a larger number of shares we should be ready to adopt some general plan of issue in the matter.

After some further conversation with regard to the issue of shares, Mr. HODGSON (a director) said the debenture-holders had the option of taking five shares for each of their debentures until the 25th inst.

On the motion of a SHAREHOLDER, seconded by Mr. WALLACE, a vote of thanks was passed to the Chairman and directors.——The meeting then closed.

CALLAO "BIS" GOLD MINING COMPANY.

An extraordinary general meeting of the shareholders was held at the City Terminus Hotel, Cannon-street, on Thursday, for the purpose of confirming or otherwise the resolutions which were passed at the adjourned extraordinary general meeting of the company, held on the 1st. inst. Major-General NUTHALL in the chair.

Mr. J. H. THORNTON (the secretary), read the notice convening the meeting and the resolutions, which were as follows:—

That Clause 58 of the Articles of Association of the Company be expunged, and that in lieu thereof the following clause be substituted—"Every director shall at the time of his appointment be the registered proprietor of at least 400 shares in the company."

That Clause 65 of the Articles of Association of the company being altered by the following words being expunged therefrom—"But it is expressly provided that, notwithstanding any rule of law or equity to the contrary, no contract or arrangement entered into on behalf of the company with any director or with any company, corporation, or partnership of or in which any director shall be a member or otherwise interested shall be avoided, nor shall any director be liable to account to the company for any profit realised by such contract or arrangement (especially that referred to in Article 35 of these Articles) by reason of such director holding that office or being a promoter of the company, or of any fiduciary relation thereby established. No director, however, shall vote in respect of any such contract or arrangement entered into with him personally or with any private partnership of or in which he shall be a member or otherwise interested, but any director may vote in respect of any such contract or arrangement entered into with any company or corporation of or in which he shall be a member or otherwise interested."

That clause 90 of the Articles of Association of the company, as follows, be expunged:—"All dividends remaining unclaimed for three years after having been declared may, by a resolution of the directors, or of a general meeting, be appropriated to and retained by the company; but the directors may at any time thereafter, if they shall so think fit, authorise the payment thereof to any claimant or claimants who shall adduce a title thereto to the satisfaction of the directors."

On the motion of the CHAIRMAN the resolutions were confirmed, and the meeting closed.

CAPE OF GOOD HOPE DIAMOND MINING COMPANY.

The first ordinary general meeting of shareholders was held at the offices of the company, Coleman-street, on Tuesday,

Mr. D. P. BLAINE in the chair.

Mr. J. A. J. SHAW (the secretary) read the notice convening the meeting.

The CHAIRMAN said—Gentlemen, I have not much to report, for the company has only been formed a short time. There was an unfortunate mistake with regard to the telegram sent to the Cape—that the works were to be stopped on account of the late proprietors from the date of the commencement of the company. The manager understood that the works were to be stopped altogether, and discharged our labourers, which threw us back a good deal; but we have got the men there now again, and operations have been resumed. We believe that by this time the new machinery is there, and in course of erection, and that we shall be able to do considerably more work than hitherto. We have a telegram from the manager to say that he has shipped about 850*l.* worth of diamonds, the result of the washing of 2630 loads; but we really cannot say what can be done until the new machinery is up, because the machinery that was there was on a very small scale indeed. There is also a letter from the manager, from which the secretary will read an extract. Everything looks very encouraging, but there has not been much time to have done much work. The meeting is more of a formal character than anything else.

The SECRETARY: The letter to which the Chairman has referred is dated June 16. It gives the details of the work, and explains the mode of raising the stones, and then goes on to say:—"Washing was started this morning, and I estimate our expenses dating from to-day will be at the rate of about 150*l.* per week, from which we shall wash 250 loads per day, with the result I hope of 'finds' to the value of 500*l.* When the company's large gear is in working order we shall I think be able to do about 1000 loads a day, at a cost of about 400*l.* per week, or it may be 350*l.*"

Mr. G. LINDO: It is probably known by shareholders in companies the object that the Legislature had in calling shareholders together at the expiration of a short time from the incorporation of a company. The time named by the Act of Parliament is only four months. The object of that is to let you know that the property which was stated to be made over to your company has been made over, and that the company may be treated as a going company. The Act also provides that if within a certain time—that is 12 months—the company does not not enter on its work then any shareholder can say—"Dissolve the company, you are not going to do any business; as you have never began you cannot come to an end, and the sooner you wind-up the better." The object the Legislature had was to let the shareholders know exactly whether the company was to go on or not Well, the Chairman has told you that the company is intended to go on, and that it has very good prospects as to the future. I am not going to enlarge at all upon that, but I would call your attention to two very important features with reference to this company. The first feature is as to the nature of the business of this company. Now, we have had very great experience everyone of us, and the public generally, of the number of companies that have come out in the year 1881. I say a most remarkable year for the manufacture of companies. You have seen trading companies and mining companies, and all kinds and descriptions of companies started. Whether they are all likely to be successful or not you are as good judges as we are; but there is a marked distinction, first of all, with regard to diamond companies over any other mining company, and that is that an ordinary mining company, including gold, is a mere speculation, extremely doubtful as to its results, but diamond companies cannot be put into that category at all. Diamond companies now are proved beyond all doubt to be actual going concerns with valuable property, which you have merely to work down to a certain depth in order to arrive at a statement which can be made very approximately indeed as to the actual return that your diamonds will produce. If you go down a short depth to what is called in expert language, the "yellow," you know you will have some return, but not so much as when you get to the "blues." When you do get to the blues—which have been arrived at in many districts in the Cape, such as Kimberley and Dutoitspan, where your mine is—you can tell within 10 per cent. what your dividend is likely to be. Among all the mining companies, good as they may be, that have come out within the last 12 months, not the very best of them—and I suppose the Indian Gold Mines of Glasgow are one of the best—can tell you whether their dividend will be 60 or 6 per cent. Diamond companies, therefore, must be put upon a very different footing to the ordinary gold mining company, or any other mining company in Cornwall or elsewhere. It is perfectly true that our property is very far away, but there is this to be said, that the laws at the Cape are more stringent than in this country. It is a very curious fact, but it is nevertheless true, that robberies committed at the Cape are considerably less frequent than robberies committed in mining districts in this country. The reason of that is that a man is utterly lost—he is punished severely, and if he does anything to disgrace himself he can never get a good position or occupy another situation in the Cape of Good Hope. With regard to the title of the property, I believe that the Cape of Good Hope Diamond Company was the first public diamond mining company ever introduced into this country, at any rate it was the first company publicly advertised. A great many private companies have been formed, and I think everyone of them is successful. Ours was the first company of the kind ever thrown open to public subscription, and it is very satisfactory to know that the private companies have been kept in the hands of a few individuals, because I find that when you get anything good it is the few private individuals who get it and not the public; but in this case those gentlemen who are in the company may congratulate themselves on the facts made known by the enquiries of your Chairman, who very modestly said little or nothing of what he did himself; but I may say for him that he used the utmost amount of caution when the company was started, and insisted on the fullest information being given on a vital point, which was the title to these mines. There may be some gentlemen who know the way in which property is held in the diamond district, and there may be others shareholders in this company who know very little about it. I think the majority of us do know but very little of the system which is adopted there, and for the information of the shareholders I may state at once that that system is the most perfect and the most complete system of registration you can possibly have. If there is any charge or any incumbrance of any description on the mines or the adjoining acres, that charge has to be wiped off before the vendor can transfer the claims. The Chairman communicated with his own private solicitor at the Cape, who happened to be the Government Attorney there, and he sent us a telegam in a very concise form to this effect—your title is in order; the claims are transferred into the name of the company. With the certificate of registration that is issued by the Registrar at the Cape you have an absolute and indefeasible title; and, therefore, you will avoid litigation in respect to the title of the property. I think it is necessary that the shareholders should have understood this matter, and also that this mine was purchased at a price considerably under that at which Dutoitspan claims have been brought out since this company was formed. It will, doubtless, be satisfactory to the shareholders to know that the title under which your company hold these claims is, in the minds of the directors and advisers of the company, as complete and as perfect as it is possible to be.

A SHAREHOLDER: What is the prospect of obtaining a settlement?——The CHAIRMAN: The papers have all gone in some time ago. Everything is complete, but the Stock Exchange Committee have had a great pressure of work. We expect to get a quotation very shortly. There is nothing to hinder it.

Mr. ADLER: I think the result so far is highly satisfactory.——The CHAIRMAN: I have no doubt our claims will prove as good as any of the others when we get rid of the surface.——Mr. LINDO: The adjoining claim cost 5000*l.*, whereas ours only cost 2300*l.*——Mr. VAN RAALTE: I understand that at present we could sell our claim for 3500*l.*——The CHAIRMAN: That is for ground upon which there has been scarcely any work done at all. There is a large superincumbent mass which has to be got rid of, but when once you get to the "blue" you get the rich, productive, diamondiferous soil.

Mr. ADLER: What do you value the "blues" at?——The CHAIRMAN: About 15s. a load, it is estimated.

A DIRECTOR: The manager says we shall get 1000 loads a day when we are at the blues, at 17s. 6d. per load.——The CHAIRMAN: I think the machinery will prove to be of the very best description.

The meeting then closed, with a vote of thanks to the Chairman and directors.

DINGLEY DELL ESTATES AND GOLD MINING COMPANY.

The first ordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Monday,

Colonel W. M. COCHRANE in the chair.

Mr. T. W. MARTIN (the secretary) read the notice convening the meeting.

The CHAIRMAN said: I am sorry that we have not a larger attendance, but I suppose the shareholders have so much confidence in the board that they do not think it necessary to attend. As you are aware this is the statutory meeting of the company, which is only held as a matter of form, properly speaking, but of course the board are very happy to take this opportunity of bringing before your notice what they have been doing during the time that has elapsed since the company has been formed. I think one thing that will be satisfactory to you to hear is that the whole of the share capital has been taken up. With regard to the title, the money has been sent out for the purpose of stamp duty, and no doubt that will be most satisfactory. With regard to a Stock Exchange settlement we intend as soon as possible to apply for a settlement and quotation. We have had letters from Mr. Ryan, who is at present residing on the property, and the board have given instructions to him to get as much for the reefs as he can ready for the machinery which we are about to send out. The machinery is already packed, and I suppose it will be forwarded during the next week; but the board thought it right not to go to a very large expense at first. They have provided two engines, one of 10-horse power and one of 6-horse power, with a crusher and two pulverizers at a cost of about 1000*l.* We thought that in the first instance and before going to any very large expense it was right to prove the property, and to be able to let you know what has been the result of the trials with this machinery. I think we have been very fortunate in having secured the services of Captain Williams, who has been engaged as mining captain. He has had great experience of mining, and the board are very well satisfied with him. We are also sending out a miner with him, so that I trust, as soon as they get out there, they will be able to set to work at once to prove what these reefs are and as to their value. The assay that has been already made gave 5 dwts. to the ton, but that was of course only for surface stone, and the question is what it will be when they get to the reef. You must be well aware that in a company like this you require great patience in waiting for information from the mines. They are a long way off, and there is great difficulty in getting the machinery up through the ghaut and getting it fixed, and those who go in for this sort of thing must be perfectly willing to wait a reasonable time. I may mention that I have just come up from Scotland, and when the telegram came over the other day with regard to the 2 ozs. of gold to the 19 tons of quartz, the old Scotchmen who were with me at the time made a great joke of it, and no doubt it was a great disappointment; but I understand that a very different report has been received from the Indian Gold Mines Company of Glasgow.

A SHAREHOLDER: The telegram states that they have obtained 4 ozs. of gold to the ton for the five tons crushed.

The CHAIRMAN: That is a very different story, and the shares which went down to 15*l.* have gone up to about 40*l.*, and we may hope that ultimately Dingley Dell Estate may come to the front in the same way. I have no doubt, from what one hears, that we have a very intelligent manager there in Mr. Ryan. He has been there for many years. It is a very curious thing that some little time ago a brother officer of mine seeing my name on the board said—"I can tell you something about the Dingley Dell Estate. I have been all over it, and consider it one of the best estates in the country. I have passed all over it, and staid some time on the estate." I think it is very satisfactory to have such an opinion as that. The machinery that has been sent out is on its own wheels, and by fixing a pole to it bullocks will be able to draw it up the ghadt. Besides the two engines there is a stone breaker, and a pulverizer in duplicate parts. We have sent out two fitters with these to see that all the machinery is properly erected. There is a drawing here of the machinery that we have sent out. I don't know that I have much more to say. I can only say that the board desire to bring every information before the shareholders that would be of use or interest to them. I may add that we are very fortunate in having two gentlemen on the board, one Mr. Paterson, who has been inspector of machinery for the Government, has very kindly exerted himself in seeing that the whole of the machinery is well fitted and properly made for being sent out; and we have another gentleman on the board, Mr. Marmont, who is an engineer himself, and the board have derived great benefit from the advice of this gentleman in carrying everything out that is necessary, and I think the shareholders may congratulate themselves that there is every prospect of everything being done to prove what the property is worth, and as soon as we have any *bonâ fide* information the shareholders shall be made acquainted. I shall be happy to answer any question that the shareholders may wish to put. A telegram has just arrived from India stating that the title is perfect. We have had about 600*l.* to pay for the stamps, and I think it is very satisfactory to be able to announce to the meeting to-day that the titles are completed.

Colonel WOOD: It is satisfactory to know that the shares are taken. Does this company undertake any other work but gold mining?——The CHAIRMAN: Yes. It is a large property. Altogether we have 600 acres, and we have about 15,000 cinchona trees. It takes about three years for these trees to grow, and of course every year they are improving. Mr. Ryan is managing the whole of the property.

Colonel WOOD: And we are sure of getting some revenue from them?——The CHAIRMAN: Yes. They are considered to be very valuable. We have also some coffee under cultivation, but we do not attach very much importance to that. In the prospectus you will see it stated that we hold 200 acres of coffee plantation for 84 years at a small rent. We have secured the services of Mr. J. W. Ryan as manager. From his great experience as a planter, extending over 17 years, his recognised control over the labour market, and his practical knowledge of mining acquired in Australia, it is anticipated that the best direction for the cultivation will be secured, and that much valuable time will be gained in starting operations. While the machinery is being manufactured and the technical staff selected and sent out Mr. Ryan, with his knowledge, will be able to open out the most valuable portions of the reefs, and collect material for the machinery to at once commence operations on its arrival. These are the orders that have been given to Mr. Ryan—to push on at once—so that when the machinery arrives there will be plenty of stuff to work upon.

Colonel WOOD: Do you anticipate any difficulty with regard to labour?——The CHAIRMAN: None at all from what we hear.

A SHAREHOLDER: Were all the shares applied for?——The CHAIRMAN: Yes and all allotted.

Colonel WOOD: Just now I think the monsoon is against you on the Malabar coast where you land your machinery, and there will be very little communication between the coast and the Wynaad district.

The CHAIRMAN: We are in correspondence as to sending it to Octacomund *viâ* Madras. It costs a little more to send it that way, but it is the safest and quickest way.

Mr. SMITH: Have the directors exercised the option with regard to the payment of the purchase money?—that is whether they have paid the 30,000*l.* in shares, or how have the payments been made?——The CHAIRMAN: We have not paid anything away yet. The telegram that the titles are complete has only just been received.

Mr. SMITH: How long have you the option to pay in cash or shares?——The CHAIRMAN: There is no time specified.

On the motion of Mr. A. M. MOIR, seconded by a SHAREHOLDER, a vote thanks was passed to the Chairman, and the meeting then closed.

SOUTH PENSTRUTHAL MINING COMPANY.

The ordinary meeting of shareholders was held at the offi Drapers' Gardens, Throgmorton-street, on Wednesday,

Mr. JAMES WALTON in the chair.

Mr. E. ASHMEAD (the secretary) read the notice convening the meeting, and the minutes of the preceding meeting, which were confirmed. The accounts for the five months, ending with costs to May 21, showed a balance of liabilities over assets amounting to 1178*l.* 17s. 6d. The labour costs for the five months were 918*l.* 8s. 3d., and the merchants' bills 787*l.* 15s. 8d. The arrears of call were 720*l.* 5s. 4d. The agent's report was as follows:—

July 18.—The mine is now draining 4 fms. below the 60; the lode in the ends of the shaft below this level presents a better appearance than at any point below the 40, and judging from its character and composition we ought very soon after commeucing to sink below the 70 to find the contemplated bunch of copper ore. Finding the shaft full bdlow this we thought it best to fix the plunger at this level before going further down. The shaftmen are now engaged cutting ground for bearers and cistern, and no time will be lost in getting it to work.—Flat-rod Shaft: This shaft has been enlarged and secured to the back of the 60, where we find it full of stuff. The pitwork is brought down to the 60, with skip-road completed to the 50, and this we shall complete to the 60 in a few days, when we shall be ready to clear the accumulated stuff, and drop the fork lift below. Bob, stays, &c., are being fixed, and as soon as the plunger is ready at the engine-shaft we shall at once commence forking the eastern part of the mine. In the course of another week we shall commence clearing and securing both the 30 cross-cut to south tin lode and the 60 cross-cut north to copper lode. Also in the course of six weeks or two months the necessary pitwork will be fixed, the shaft clear of stuff and cut down to the 70, when sinking will be at once resumed. The machinery is in good order and working well; surface work, such as flat-rod, &c., are in a forward state, and near completion.—STEPHEN DAVEY.

The CHAIRMAN formally moved that "The accounts and the report now read be passed and adopted, and printed and circulated among the shareholders."

Mr. J. PETRIE seconded the motion, and asked whether everything possible was being done to get in the arrears of calls?——The SECRETARY said about 175*l.* was due from one shareholder, who was making arrangements for paying by instalments, and 148*l.* due by another shareholder would have to be set against goods supplied by him to the mine.

Mr. WADDINGTON thought the next meeting should be made special, to forfeit the shares in arrears of calls. He had the largest interest in the mine, and he was inclined to carry it on himself if everybody else gave up, for he believed that in South Penstruthal they would have a second Wheal Agar. He asked Captain Davey whether he had seen any more of the capels of the copper lode?

Capt. DAVEY in reply said, the ground was becoming a little easier below the 40, and where the ground had been a little easier, the capels and the lode have not been large, but rather small and stinted; but at the 60 the capels were becoming much larger again, showing evidently that the capels were increasing in size while the lode was getting larger. He believed they would have a bunch of copper very soon after commencing to sink the shaft. Judging from the appearance of the lodes at the 60 and below it, there was copper there now, but not in paying quantities. There was a good lot of black ore, as well as of grey and yellow ore, and he hoped that ere long they would have cut a tin lode, and have commenced to drive the 70 fathom level. The chances were that they would meet with a bunch of ore previous to that, and he hoped that they would do so.

Mr. WADDINGTON remarked that it would be a very great assistance to them if they could find the tin lode which had been so rich near the eastern boundary of the sett, because they could get at it from all the levels and by short crosscuts, and they would have a very good property in a short time.

Capt. DAVEY, in reply to a question, said they had had a large quantity of stuff to take away, owing to the old drawing arrangements having been very badly planned.

The motion was then adopted; and on the motion of the CHAIRMAN, seconded by Mr. LABY, a call of 5s. per share was made, payable on or before Aug. 10 at Messrs. Glyn's.

The meeting then closed with the usual compliments.

NORTH PENSTRUTHAL MINING COMPANY.

The ordinary meeting of shareholders was held at the offices of the company, Draper's Gardens, Throgmorton-street, on Wednesday,

Mr. JAMES PETRIE in the chair.

Mr. E. ASHMEAD (the secretary) read the notice convening the meeting, and the minutes of the previous meeting, which were confirmed. The accounts for the five months, ending with costs to May 21, 1881, showed labour costs amounting to 1555*l.* 17s. 10d., and merchants' bills 1065*l.* 19s. 2d., a 23-in. cylinder and appendages for whim-engine, &c., having cost 225*l.* The black tin sold had realised 446*l.* 13s. 10d., and the balance of liabilities over assets was 1411*l.* 13s. 10d. Mr. Ashmead also read the following report of the agents:—

July 18.—Highburrow Shaft: Since the last general meeting we have completed, the sinking of this shaft to the 120 (this sink is 12 fathoms), driven the cross-cut north, and cut the lode, which is full, 9 ft. wide in both the east and west end, composed of quartz, chloride, and iron pyrites, worth for tin, 6*l.* per fathom, and a small percentage of black copper ore; in fact, it is an exceedingly fine looking lode, although not at present producing tin or copper to pay. The lode in the 108, driving west of shaft, is 2 ft. wide, producing low quality tinstone. The lode in the 103, driving east of shaft, is 4 ft. wide, and worth, for tin, 5*l.* per fathom. The 103 cross-cut is driven north 23 fathoms. In the course of this driving, we have passed through one small branch, about 6 fms. north of new lode. This cross-cut is being pushed on by boring machinery to cut No. 2 and the Gallish lodes with all possible dispatch. The lode in the 88, driving west of shaft, is 4 ft. wide, and worth about 5*l.* per fathom for tin and copper. The lode in the 72, driving west of shaft, is 2½ ft. wide, producing

saving work for the stamps.—New Lode: In the 58, driving east of cross-cut the lode is 2½ ft. wide, and producing about 2½ tons of mundic to the fathom, with a little copper ore. We are looking forward to meeting shortly with copper in paying quantities here.—Ward's Lode: The lode in the winze sinking below the adit level, is 2 ft. wide, and worth, for tin, 6*l.* per fathom. We have sunk a shaft to the west of Highburrow on the elvan course, and are now cross-cutting to prove its value. To the east and about the adit level good returns of tin have been made. During the four months we have opened in shafts, levels, and winzes 69 fathoms, and have employed 45 men and 5 boys. We are still encouraged by the present prospects in the bottom, seeing the lode is large and more defined.—S. DAVEY, W. POLKINGHORNE.

The CHAIRMAN said: I do not know that I can add much of importance to what you have just heard stated. From the accounts now presented it will be obvious that so long as our returns of tin remain stationary and we continue to explore the ground with the same spirit our monthly expenditure will amount to something like 450*l.*, which means a call of 6s. per share to meet our four monthly costs. At our meeting in March last, you will no doubt remember its being reported that the Highburrow lode was 3½ ft. wide, and producing a low quality of tin ore, and that some 5½ fms. north of Highburrow we had another lode 2½ to 3 ft. wide, and worth 7*l.* to 8*l.* per fathom, this lode with a south underlie indicating a junction of the two lodes at about the 120 fm. level. This junction has evidently taken place below that, and the 120 fm. level is now showing, as reported by the agent, some 9 ft. wide. It did seem to the committee no way unreasonable to expect that at the junction of these two lodes we should find a considerable improvement, but our expectations have not been realised up to the present. This wide lode, as stated by our agent, is being driven upon east and west, and we hope and shall be very pleased to hear of some improvement very shortly. I have now to move that the accounts and the report now read be passed and adopted, and printed and circulated amongst the shareholders.

Mr. H. WADDINGTON, in seconding the resolution, said he had expected that they would have had something pretty good at the junction; but at the same time, though they had not got it yet, they would not despair of it. At East Pool only recently they drove a cross-cut to cut the lode, and found nothing there, so to speak, of any value compared to what they had had; but they turned away, and driving upon the lode found it to be worth over 100*l.* per fathom, and it had continued to be worth from 50*l.* to 100*l.* per fathom for a considerable time. At Wheal Agar also, owing to a little fault or slide, they found a comparatively poor lode for a few feet, but east and west of the slide they got a wonderfully rich lode, so that although the lode might be poor exactly opposite their shaft, they might by driving east and west find a lode quite up to their most sanguine expectations, and until the lode was proved he did not despair of it. Whereas in this case they had a large lode, the chances are that they would make very good returns, and he thought that by driving back the ends west they would have a paying mine; but it would take time and a little more patience.

Capt. S. DAVEY said they had driven a cross-cut to cut the lode at the 120, and the probability was that they would find the same shoot of ore they had had at the upper level, because in almost every instance the shoots of tin either dipped east or west, and consequently their chances were very good with regard to meeting the shoot of tin. They might only have had the top of it at the 108, and that they would have a continuation of it at the 120.

The CHAIRMAN: How far west is it that you have tin in the 108?——Captain DAVEY: About 7 or 8 fms.

Mr. LABY: What depth has been sunk since the last meeting:—Capt. DAVEY: Only about 3 fms. in the shaft, but we have cut a cross-cut and driven on the lode east and west.

The report and accounts were then adopted.

On the motion of the CHAIRMAN, seconded by Mr. W. H. Lethbridge, a call of 6s. per share was made, payable on or before Aug. 10 next, at the Alliance Bank, London.——The meeting then closed.

CATHEDRAL CONSOLS MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices of the company, Drapers' Gardens, on Wednesday,—

Mr. JAMES LABY in the chair.

Mr. EDWARD ASHMEAD (the Secretary) read the notice convening the meeting, and the minutes of the preceding meeting, which were confirmed. The accounts charging the costs to end of May showed a balance of liabilities over assets amounting to 720*l.* 13s. 2d. The secretary then read the following report from the agent:—

July 18.—During the past four months we have cleared and secured the adit level 150 fms., and driven a side level (or what is locally termed a side tie) 13 fms. Cleared and secured Berryman's shaft from the surface to the adit 20 fms. These are now permanently secured, and the adit level laundered from the north of Rawson's to the south of the old lode—a distance of about 100 fms. The outlay incurred doing the said work will be more than counterbalanced in one winter from the saving of coal, pitwork, &c. Lawry's shaft on the old lode is sunk 12 fms. from surface, and will be pushed on as fast as possible to reach the adit level, where the lode is 6 ft. wide, composed of quartz, fluor spar, and a small percentage of copper ore. We have put in new well work (or condensing) to the 60-in. pumping-engine, also new tubed the whim-engine boiler, and put up new sheers and repaired the capstan, also connected balance-bob with connecting-rod, stays, new catches, bearers, &c. Since starting the engine on June 8 we have forked the mine to the 50 fm. level, requiring only about 12 fms. of new pitwork; in fact, our progress has been exceptional from the first. The water from the old mine has up to this been steadily flowing, and we hope to have the mine on the new lode cleared up to the bottom in the course of another month, when all points of interest will at once be resumed.—STEPHEN DAVEY, STEPHEN DAVEY, jun.

The CHAIRMAN said it was four months since they last met. At that time it was estimated that it would take about four months to clear the adit level and get the water out of the mine, and he need scarcely say that the mine would be opened up as soon as passible. With reference to the sad accident which happened six months ago, he mentioned that on Monday last five out of the eight bodies were recovered, three still remaining in the bottom of the mine.

Captain S. DAVEY added that the other three bodies were at the bottom of the shaft, and mentioned that since the accident so much per week had been paid to each of the bereaved families. He hoped to get the water out of the bottom of the mine in the course of a month or five weeks, and then they would resume operations at every point of interest. They would have to use a little care and discretion with respect to the unwatering of the old mine for a while, at the same time they would the shaft down on the course of the old lode as fast as possible, in order to follow it down and ventilate the two combined. It was necessary to push on Laurie's shaft as quick as possible. This was now 12 fathoms from surface, and they could sink it for 4*l.* per fathom, excluding timber. It had been stated by old men that in the old mine they had just struck the ore, and as they got the water out they would be able to see if that were so. He had no doubt that if Cathedral were worked properly, they would be a great property; but it would take some little time to develope. There were other lodes which they could manage to reach by the same appliances, and their machinery would be sufficient to keep the water out for some considerable time. The prospects of the mine were very fair, and he believed that in time the shareholders would received back a fair return for their investment.

The CHAIRMAN observed that the labour costs were moderate.

Captain DAVEY said they had been as economical in the working of the mine as they could be consistent with efficiency.

On the motion of the CHAIRMAN, seconded by Hr. W. H. LETHERIDGE, the report and accounts were adopted, and a call of 5s. per share was made, payable on or before Aug. 10.

Mr. H. WADDINGTON, in proposing a vote of thanks to the Chairman, said—When they got below the 60 he had no doubt whatever but that the mine would turn out a fine property. It was at that depth that they had always expected the richness.

The proposition having been adopted, the meeting closed.

THE NEW QUEBRADA COMPANY.

At the general meeting of shareholders, to be held at the City Terminus Hotel, Cannon-street, on July 28, the following report will be presented:—

OUTPUT.—The production of mineral continues to show a steady and satisfactory increase. Communication between the mines and the coast by means of the Bolivar Railway may be said to have commenced on Jan. 1, 1878, and the quantity of mineral dispatched from the dressing-floors since that time has been as follows:—1878, 8400 tons; 1879, 14,400; 1880 to the coast, 17,400; 1330 to the roasting floors at Casa de Teja, 4087=21,487 tons—and the directors have reason to expect that a further satisfactory development will be apparent in future years. The directors mentioned in their last report that the enlarged stoping operations would probably result in a slight depreciation of the copper contents of the ore to be exported, and so it has proved, the actual figures being as follows:—The ore exported in 1879 averaged 13 per cent. of copper; ditto in 1830, 12 per cent.; the ore sent to smelting works about 8 per cent.; all dry assay.

WORKINGS AT AROA.—The continued drivage of the deep level northwards within the lode and the various cross-cuts to the eastern wall show that there is no diminution in the extent of the ore deposit, as the workings proceed north, in this the lowest part of the mine hitherto attacked. Large additional quantities of ore have been opened up during the year, and the old stoping ground continues to produce pyrites both for export and smelting purposes, without an appearance of exhaustion. The operations have been conducted with regularity and success. The continued evidence of abundant supplies of ore, coupled with the favourable indications presented by the lode at the point of the recent discovery hereafter alluded to, relieved the directors from any doubt as to the propriety of commencing a new adit to unwater the mine at a point 60 ft. below the old deep level, and to open up additional stoping and productive ground. This level has been commenced at a point adjacent to the railway, and is projected to run at about right angles to the lode, which it should intercept some 80 to 100 lineal fathoms from day, and a little to the south of the new discovery.

BORING PLANT AND MACHINERY.—The directors have pleasure in stating that a set of boring machinery has been sent out to the mines, where it is now being put in place. The plant is very complete in itself, and includes the necessary steam appliances, compressors, &c., to drive four drills in one forebreast or heading. This machinery will be applied in the first instance to hasten the completion of the new adit (Holman's level), and when the lode has been thus intercepted a main tunnel will probably be driven north and south on the line of the lode—north to Titiara and south to Aroa.

TITIARA.—Exploratory work on a small scale has been continued at this mine, but nothing has occurred calling for particular comment.

HOLMAN'S DISCOVERY.—Considerable attention has been devoted to the discovery of ore (before alluded to) at a point 570 yards north of Aroa, in the direction of the Titiara lode, to which your notice was called in the last report. The workings here have opened up a strongly defined lode, pointing southwards to Aroa and northwards to Titiara, the mineral conditions being very similar at all points. It was not to be expected that any considerable quantity of copper ore would be met with at surface, but the short levels already driven on the lode have produced some 350 tons of ore, yielding 14 per cent. of copper, dry assay, and the superintendent is very sanguine that large quantities will be obtained at a greater depth. In anticipation of this the new adit has been projected to strike the lode at a point about 100 yards south of the present workings, and will, therefore, afford all the requisite facilities for proving the lode at this important part of the property.

SMELTING WORKS.—This department continues to receive the board's unremitting attention. The inauguration of new works, requiring exceptional technical experience, and where the knowledge of the conditions to be dealt with can only be acquired by actual work, necessarily involves delay, but all the preliminary difficulties have been successfully surmounted, and the smelting operations were started in earnest shortly before the end of the year. The regulus produced prior to Dec. 31 (about 200 tons) has arrived in this country and been sold, and there is no doubt that the company will find a ready market for all similar material that it can produce. The furnaces continue to run well, a continuous supply of regulus is being maintained, and the superintendent is about to erect some additional furnaces.

PROPOSED ALTERATION OF ARTICLES OF ASSOCIATION.—The conditions of the modified contract concluded with the Bolivar Railway Company, which is to run for a term not exceeding 20 years from Jan. 1 last, and which supersedes the original contract of 1873, are of such a character that half-yearly statements of the revenue account would not only be misleading as an indication of the company's operations and prospective profit, but would be almost impracticable, whereas if the accounts be made up for each year as a whole, the result will be definitely ascertained and set out. Under these circumstances the board sees no alternative but to submit for your approval certain proposed alterations in the Articles of Association to accomplish the required object, which is to submit yearly instead of half-yearly accounts, and henceforward, therefore, if these alterations are made, the general meetings will be held yearly instead of half-yearly. The attention of shareholders is particularly requested to the notice which accompanies this report, wherein will be found particulars of the special resolutions proposed to be adopted.

REVENUE ACCOUNT.—It will be seen that the revenue account shows an estimated profit balance of	£10,744	1	3
Independently of the amount brought forward from last year	4,707	9	0
Thus making an available total of	£15,451	10	3

Which the board recommends to be dealt with as follows:—That 9197*l.* 14s. be applied to the payment of a dividend of 3s. per share, equal to 3*l.* per cent. for the year 1880, payable by warrants to be issued on Aug 12, the balance to be carried forward.

BOLIVAR RAILWAY COMPANY.—This company is making further additions to its floating plant, so as to keep pace with the demands of the increasing traffic between the mines, smelting works, and the coast.

GENERAL REMARKS.—The recent examination of the mines, smelting establishment, and estate by Mr. Ormiston has furnished corroborative testimony to the great extent and importance of the mineral property, and satisfied your directors that the local administration is in able and zealous hands. The retiring directors are Mr. T. W. Meates and Mr. George Lyall, who, being eligible, offer themselves for re-election. The retiring auditor, Mr. G. T. Rait, offers himself for re-election.

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine sharedealer, Redruth (July 21), writes:—Our market has been inactive during the week. Cook's Kitchens advanced 20s., East Pools 15s., and Wheal Agars 20s. Peevors have fallen 30s. Market to-day is very dull. Prices are as follows:—Blue Hills, 2⅞ to 3⅛; Carn Brea, 23⅞ to 24⅛; Cook's Kitchen, 17 to 17⅛; Dolcoath, 65 to 66; East Pool, 37¾ to 38; Killifreth, ¼ to ½; Mellanear, 4 to 4⅛; New Cook's Kitchen, 6 to 6⅛; New Kitty, 1½ to 2; North Busy, ⅓ to ½; Penhalls, 1¼ to 1½; Pedn-an-drea, 3⅞ to 4⅛; South Condurrow, 9¼ to 9¾; South Crofty, 8 to 9; South Frances, 14⅛ to 14¾; Tincroft, 16 to 16½; West Basset, 14⅛ to 14¾; West Frances, 12¼ to 12¾; West Kitty, 4¾ to 5; West Peevor, 14 to 14½; West Poldice, 5⅛ to 5⅜; West Seton, 20 to 22; Wheal Agar, 14½ to 14⅝; Wheal Basset, 4 to 4¼; Wheal Grenville, 7¾ to 8; Wheal Peevor, 16½ to 17; Wheal Kitty (St. Agnes), 2 to 2¼; Wheal Uny, 1½ to 2; Wheal Boys, 2¼ to 2⅛.

— Mr. J. H. REYNOLDS, stock and share broker, Redruth (July 21), writes:—A moderate amount of business has been transacted during the week in the leading shares, Carn Breas, Dolcoaths, East Pools, and Agars, being mostly in request; the latter having improved to 14¼ buyers. Subjoined are the closing quotations:—Blue Hills, 3 to 3¼; Carn Brea, 24 to 24⅛; Cook's Kitchen, 17 to 17⅛; Dolcoath, 65¼ to 65¾; East Pool, 37¾ to 38; Marke Valley, 1 to 1¼; Mellanear, 4½ to 5; New Cook's Kitchen, 6¼ to 6¾; North Herodsfoot, 10s. to 15s; Pedn-an-drea, 3¼ to 3⅞; Phœnix, 4¼ to 4½; Penhalls, 1¼ to 1½; South Condurrow, 9½ to 10; South Crofty, 8½ to 9; South Frances, 14⅛ to 14¾; Tincroft, 16 to 16½; West Basset, 14¼ to 14½; West Frances, 12½ to 13; West Peevor, 14 to 14½; West Poldice, 5 to 5¼; West Seton, 20 to 21; West Kitty, 4¾ to 5; Wheal Agar, 14½ to 14⅝; Wheal Basset, 4¼ to 4½; Wheal Boys, 2¼ to 2⅛; Wheal Grenville, 7½ to 8; Wheal Jewell, 10s. to 15s.; Wheal Kitty, 2 to 2½; Wheal Peevor, 16½ to 17; Wheal Prussia, 1¾ to 1½; Wheal Uny, 1½ to 2. Cornish Bank, 24*l.* 10s.

— Mr. M. W. BAWDEN, Liskeard (July 21), writes:—The mining market continues firm for all the leading tin mines whilst good prospective shares are entirely neglected. At Marke Valley Mine meeting, held at the company's offices, Salisbury, yesterday, a call of 5s. per 9000th share was made. At East Caradon Mine meeting, held at the company's offices, Salisbury, yesterday, a call of 5s. per 6144th share was made. Subjoined are the closing prices:—Bedford United, 1¾ to 1⅞; Carn Brea, 24½ to 25; Cook's Kitchen, 16½ to 17; Dolcoath, 64½ to 65; Drake Walls, ½ to ⅝; Devon Consols, 8¾ to 9; Devon Great United, 1¼ to 1⅜; East Caradon, 1 to 1⅛; East Crebor, ⅜ to ½; East Herodsfoot, 1 to 1⅛; East Pool, 37½ to 38; Gawton United, ⅞ to 1; Glasgow Caradon, 1 to 1⅛; Gunnislake (Clitters), 3 to 3⅛; Herodsfoot, ½ to ⅝; Hingston Down, 1 to 1⅛; Marke Valley, 1⅛ to 1¼; New West Caradon, ½ to ⅝; North Herodsfoot, ½ to ⅝; Old Gunnislake, ½ to ⅝; Phœnix United, 5 to 5⅛; Prince of Wales, ⅞ to 1; South Caradon, 52½ to 55; South Crebor, ½ to ⅝; South Crofty, 9 to 9½; South Devon United, 1¾ to 2; South Frances, 14 to 14½; Tincroft, 17½ to 18; West Basset, 14 to 14½; West Caradon, ½ to ⅝; West Frances, 12½ to 13; West Mary Ann, ⅞ to 1; West Peevor, 15½ to 16; West Phœnix, 1¾ to 2; West Seton, 19½ to 20; Wheal Agar, 14 to 14½; Wheal Basset, 4½ to 4¾; Wheal Crebor, 3¾ to 3½; West Tolgus, 15 to 15½; Wheal Grenville, 8 to 8¾; Wheal Hony and Trelawney, 2¼ to 2½; Wheal Jane, ⅝ to ¾; Wheal Peevor, 16½ to 17; Wheal Uny, 2 to 2¼.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, sharebrokers Queen's Chambers, Market-street (July 21), write:—More disposition to operate than has been the case for some little time is to be noticed as characterising the feeling of the markets during the past week, the more healthy tone reported as ensuing as last settlement progressed having developed, and caused a certain amount of buoyancy, which has had the effect of pulling up prices of the leading securities, more or less, all round. The continuance of fine weather has, without doubt, a greatly stimulating effect on figures, holding out, as it does, so fair a prospect of a good harvest, and consequent good autumn trade. The business reported is of a more general character than has been the case for some time, several concerns having been dealt in which have lately been quite neglected. Quotations, on the whole, are pretty evenly balanced as regards advances and declines, and in only very few instances are the changes at all noteworthy.

BANKS.—The business herein, though in the aggregate of fair amount, is spread over several concerns, the prices realised showing very little change from figures ruling a week ago. Variations of quotations are very few. They are as follows.—Higher: Liverpool Commercial, ¾; Manchester and Salford, 1/16. Lower: Union Bank of Manchester, ⅛. We understand the resuscitated Southport Bank has recommenced business this week.

INSURANCE.—The number of transations reported, which show no special feature, bear a rather better proportion to the week's dealing than this class has exhibited for the past week or two; still no great number of shares have changed hands. Prices, where altered, show a majority of advance, but only one—Royal (Liverpool)—is worthy of more than ordinary notice.—Higher: Royal (Liverpool), 1¼; Liverpool and London and Globe, ⅜; Maritime, ¾; British and Foreign Marine, ⅓; Manchester Fire, 1/8; and Thames and Mersey Marine, 1/16.—Lower: Ocean Marine, ⅛; Boiler Insurance and Steam Power, 1/16; and Lancashire, 1/16.

COAL, IRON, AND MINING.—Though far from active the dealings show this market to be rather less languid than of late. With the exception of Canadian Copper, Ebbw Vale, and Bolckow, nothing of moment has changed hands, and in the two latter only a very moderate amount of business is reported. The former, however, has been dealt in several times, at prices ranging from 33s. 6d. on Saturday last down to 25s. on Tuesday, rallying again yesterday to 29s., and to-day passing at 28s. and 28s. 3d. each. A rise of 2¼ in John Brown's is the only striking variation. Other changes are—Higher: West Cumberland Iron and Steel, ⅛; Ebbw Vale, ⅛; and Indian Phœnix, ⅛.—Lower: Tredegar Coal, A, ¾; Llynvi Tondu, ⅛; Chatterley Iron, ⅛; United States Rolling Stock, ⅛; Sheepbridge Coal, &c., ⅛; Bolckow (12*l.* paid), ⅛; and Canadian Copper, 4s. 6d. The selling price of Palmer's Shipbuilding, A shares, has been put up, and business has been done in them at a medium figure between last week's buying figure and this week's selling quotation.—COTTON SPINNING AND MANUFACTURING: Feeling still good, but business somewhat restricted from indisposition of buyers to fellow advanced quotations generally to the extent sellers in most cases stick for.—TELEGRAPHS are all lower where changed at all, the reduction of tariffs causing this market to go flat. Anglo ordinary are 1¼; ditto, deferred, ¾; ditto, preferred, 1¼. Direct United States Cable, ¼, and Eastern ½ down.—CANALS: Solitary transactions in Bridgewater Navigation and Rochdale Canals comprise the business done, a rise of 1/16 on the former and ⅛ on the latter are the only changes in prices.—CORPORATION STOCKS, &c., little offering; changes confined to rise of ½ in Oldham Corporation debentures, and ¼ in Manchester Corporation stock.—MISCELLANEOUS: Market not active, but tone rather better.

RAILWAYS.—During the past week prices have made good progress. The whole market showing animation, a decidedly better tone being manifested. Great Easterns are prominent in the advance, although no dividend is declared; but there is an improved surplus (28,000*l.*) to carry forward. The heavy lines have come into request, and all round exhibit a marked advance, particularly London, Great Northern, A, Caledonian, Lancashire and Yorkshire, North British, and North Eastern. A dividend of 7½ per cent., against 8 per cent. a year ago, is announced on the North-Eastern, and the pace has receded a trifle since the report. The Canadian market has again been subject to severe fluctuations, but the prices of Grand Trunk stock are not materially altered, a balance on to-day's traffic return (1255*l.* increase) contributing to this result. Great Western of Canada are a little firmer. In Americans Ohio Mortgages are stronger, while other descriptions are easier.

HULL.—Mr. W. FOWLER SUTTON, stock and sharebroker, St. Mary's Chambers (July 21), writes:—The tone of the markets for English railway stocks has been decidedly good the last few days, and prices are higher all round. This arises from encouraging traffics and harvest prospects, and it is quite possible that any slight diminution of dividends for the past half-year yet to be announced, will be entirely disregarded in consequence. Canadian stocks are firmer, but do not rally to any material extent, nor, in fact, can hardly be expected to do so until news arrives of an end having been put to the war of rates at present existing. This might come at any time, but it is more probable that it will not until the lake navigation is on the eve of being closed. American railways have been depressed all the week, and the fall has been not inconsiderable. Under ordinary circumstances a rally is fully due. There has certainly been more inquiry today in London for American stocks, which will doubtless affect New York favourably. Local Stocks unchanged. Hull Banks, 12 to 12¼; London and Yorkshire, 34s. to 35s.; Hull Tramways, 9¼ to 9½; Earle's Shipbuilding, 19 to 20; Sutton Gas, 13; Hull and Barnsley Railway and Dock, 2*l.* paid, 1½ to 1⅝.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, sharebroker and ironbroker (July 21), writes:—During the past week the market has been very quiet, and mining and mineral securities appear quite out of favour for the present. If business were brisker it might be expected the easy money market and the good weather, which confirms the prospects of a satisfactory harvest, would give an upward tendency to prices.

In shares of coal, iron, and steel companies the movements for the week comprise advances of 2s. 6d. per share each on Ebbw Vale and Marbella; but Shotts Iron have declined 2*l.* per share; Bolckow, Vaughan, 10s.; ditto (12*l.* paid), and Steel Company of Scotland, each 5s.; Chillington Iron, 3s. 9d.; Monkland, 2s. 6d.; and ditto (pref.), 1s. The Scotch Pig-Iron market has been inactive, and warrants selling from 47s. to 47s. 9d., but the feeling is, if anything, more cheerful. Benhars are lower at 8 to 9. Altarni are at 27s. 6d.; Bilson and Crump Meadow, 52s. 6d.; Bolckow Vaughan, 27 to 27½; Cardiff and Swansea Coal, 32s. 6d. to 37s. 6d.; Chapel House Colliery, 10s. to 15s.; Chatterley Iron, 5 to 6; Chillington Iron, 40s. to 50s.; Clyde Coal, 69s. to 71s.; Ebbw Vale, 7¾ to 7⅞; Henry Briggs (A), 10 to 10½; John Bagnall and Sons, 7s. 6d. to 10s.; Llynvi and Tondu, 6½ to 7; ditto (pref.), 15s. to 5s. dis.; Lofthouse Colliery, 60s. Marbella, 7 to 7⅛; Monkland Iron and Coal, 5s. to 6s.; ditto (pref.), 6s. to 7s.; New Sharlston Colliery (pref.), 70s. to 90s.; Omoa and Cleland, 18s.; Shotts Iron, 53s.; and Steel Company of Scotland, 10⅜ to 10½.

In shares of foreign copper and lead companies, the movements are generally downwards. Tharsis have declined 16s. 3d. per share; ditto (new), 7s. 6d.; Canadian, 5s.; Huntington, 3s. 6d.; and Rio Tinto, 2s. 6d. Tharsis have declined from 43¼ to 42½. Canadian Copper have declined from 33s. 6d. to 24s., but are now firmer at 28s. to 29s. Australian are at 30s. to 35s.; Huntington, 40s. to 41s.; Panulcillo, 5⅝ to 5⅞; Pierrefitte (pref. 10 per cent.), 15s. to 17s.; Rio Tinto, 19¼ to 20; and Santa Cruz, 12s. 6d. to 15s.

In shares of home mines there are still more sellers than buyers, although the copper and tin metal markets appear both slightly firm. Glasgow Caradons have improved from 19s. to 20s.; Blaen Caelen are at 20s.; Blue Hills, 60s.; Coedy-fedw, 20s. to 30s.; D'Eresby Mountain, 40s. to 60s.; Denbighshire Consolidated, 60s.; Derwent, 30s. to 35s.; Drakewalls, 15s.; East Chiverton, 20s. to 30s.; East Devon Consols, 30s. to 40s.; East Wheal Rose, 5s. dis. to par; East Blue Hills, 10s. to 12s. 6d.; East Caradon, 12s. 6d.; East Long Rake, 30s.; Fortescue, 7s. 6d.; Gorsedd and Merllyn, 50s. to 70s.; Great Wheal Polgooth, 2s. 6d.; Great Holway, 5 to 5½; Gawton, 13s. 9d.; Gover Consols, 15s.; Great Polgooth United, 10s. to 15s.; Goodevere, 20s. to 30s.; Gwydyr, 8s. 9d.; Herodsfoot, 7s. 6d. to 12s. 6d.; Indian Queens, 12s. 6d. to 17s. 6d.; Killifreth, 2s. 6d. to 5s.; Leadhills, 35s. to 40s.; Lady Ashburton, 15s. to 20s.; Llandegla, 20s. to 30s.; Mount's Bay, 5s. dis. to par; North Hendre, 4 to 5; New Penrose, 10s. to 12s. 6d.; North Molton, 5s.; New Peevor, 40s.; Old Shepherds, 5s. dis.; Parka Consols, 5s.; Pant-y-Mwyn, 10s. to 12s. 6d.; Penyorsedd, 20s. to 25s.; Roman Gravels, 11½ to 12; Silver Valley, 7s. 6d. to 5s. dis.; South Caradon, 45; South Devon, 30 to 35; South D'Eresby, 8s. 9d.; Sortridge, 20s. to 30s.; Tin Hill, 20s. to 30s.; Tamar, 15s. to 20s.; Tresavean, 5s. dis. to par; United Shephers Wheal Rose, 5s. dis. to par; Van Consols and Glyn, 6s. 3d.; Walkham United, 1s. dis.; West Crebor, 9s. 6d.; West Holway, 20s. to 30s.; West Kitty, 4¾ to 5¼; West Pateley, 9s.; West Tolgus, 16; Wheal Elizabeth, par to 5s. prem.; Wheal Fortune, 36s. 3d.

In shares of gold and silver mines there has been less business doing. The last meeting of the Glasgow Indian Gold Company, while bearing out the richness of certain portions of the property, showed that further information must be received before any positive conclusion regarding the value can be formed. Richmonds are lower, at 15⅝ to 15⅞. Akankoos are at par to 5s. prem.; Asia Minor, par to 2s. 6d. prem.; Australasian Mines, 5s.; Central Wynaad, 1s. 3d. prem.; Consolidated, of Canada, 17s.; Effuenta, 2½ to 5 prem.; Eureka (Nevada), 1s. 3d. prem.; Emma, 40s. to 45s.; Gold Coast, par to 2s. 6d. prem.; Gold Association of Canada, 15s. 6d.; Indian Trevelyans, 20s. to 25s.; Javalls, 3s. to 5s.; Mysore, 30s. to 32s. 6d.; New Callao, 7s.; New Gold Run, 4s. to 6s.; Pitangui, 60s. to 70s.; Quartz Hill, 14s. to 15s.; Silver Peak, 17s. 6d. to 20s.; and Scotch Pacific, 10 to 11.

In shares of oil and miscellaneous companies, Broxburn Oil (new) have advanced 2*l.* per share; ditto (original), 12s. 6d.; Scottish Wagon, 2s. 6d.; and Oak Bank Oil, 1s.; but Uphall Oil are reduced 5s., and Walkinshaw Oil, 2s. 6d. Uphalls have been sold from 7½ to 7¾; Droitwich Salt are 25s. to 35s.; Lawes' Chemical, 4¾ to 5¼.

YORK AND LANCASTER UNITED MINES.—These lead and zinc ore mines at Remington are showing at almost every fathom of increased depth fresh evidence of richness. The lode recently cut is found to contain ample lead and calamine to pay labour and outlay, even if the 14 other clearly defined lodes did not exist. Some of the others yield barytes, a mineral though of comparatively small value is in extensive demand, and can be obtained here in large quantities, and is being sent away weekly at a profit. The fact that the miners have invested some of their own savings in the company's stock is a far better proof of the value of the property than the mere reports, although undoubtedly satisfactory.

EDINBURGH.—Messrs. THOMAS MILLER and SONS, stock and share brokers, Princes-street (July 21) write:—During the last few days a firm tone has prevailed in the railway market, and prices have advanced. Caledonian has risen from 104⅞ to 106¼, North British from 84¼ to 86, Glasgow and South Western from 114¾ to 116¼, East North of Scotland from 60½ to 62. English stocks have also had a substantial rise. Preference and debenture stock remain firm and scarce. In the Canadian market Grand Trunks have fluctuated; the final prices show an improvement in most of these stocks. The American market does not show much recovery. The proposal to adopt limited liability by the unlimited banks has had a favourable effect on their stocks. Clydesdale has risen from 213½ to 224, Commercial from 250 to 252, National from 275 to 278, Union from 218½ to 225. Insurance shares remain firm. In the mining market, Canadian Copper shares have been heavily pressed, and fell at one time from 33s. 6d. to 25s. 6d., but have recovered to 28s. Huntington Copper have also been very weak. Tharsis have receded from 43½ to 42⅞. Brexburn Oil shares have advanced from 23½ to 24, Oakbank from 36s. to 37s. Edinburgh Gas shares have receded from 45 to 43.

IRISH MINING AND MISCELLANEOUS COMPANIES' SHARE MARKET.

DUBLIN, July 21.—During the past week there has been scarcely anything doing in mining shares, and prices have remained absolutely without change. Mining Company of Ireland are still dealt in at 2*l.* 1s. 3d., but other shares are scarcely heard of. The general business likewise appears to be very limited.

CORK.—Messrs. J. H. CARROLL and SONS, stock and share brokers, South Mall (July 20), write:—Markets remain dull. Great Southern were dealt in at 111¼ to 112, and Midlands at 84. Nothing done in Bandons. National Banks, 71⅜ to 71⅝; and Munsters, 7¼. Cork Packets dealt in at 12; Cork Gas, 6*l.* 19s. to 7*l.*; Lyons, 4*l.* 19s to 5*l.*; and Levys changed hands at 4⅜.

From Mr. JOHN B. REYNOLDS.—It is pleasurable to be able to record that a quiet but satisfactory demand has existed for our leading mine shares. A reported improvement in East Pool, the satisfactory position of Dolcoath, and the known discoveries at West Kitty, have tended to encourage investors in mines. We have no doubt that after the shock experienced by some of the new Limited Liability schemes failing to answer expectations has passed away, our prominent mines will come out into bolder relief than ever. In the meantime shareholders are not at all anxious to sell, not nearly so much so as the public are to buy.

West Polbreen shares have been in request, but have changed hands at prices far below the intrinsic merits of the property, and, as I have formerly pointed out, the quotations here do not in any degree represent or give an idea of the value of a mine which is destined to take such a high position as this. It must not be forgotten that West Polbreen is in close proximity to Trevaunance, which made 200,000*l.* profit without a call, and this fact alone would justify, in my opinion, at least 3*l.* per share for West Polbreens, whereas they are selling at about 30s. Even now West Polbreen would not be noticed but for the success of West Kitty, a success which is greater than most people are willing to admit, and than even the most sanguine ever expected. It may be doubted whether there ever has been such a discovery within a similar space of ground in the St. Agnes district. Let those who doubt go and see. Of New Kitty we wrote last week, and shareholders will be wise to be on the alert there. Wheal Agars, after suffering a temporary relapse, are strong again. A large expenditure is advised here, but without admitting the necessity. I see no reason why shareholders should part with their shares, because a little more money may be needed. If they were certain to get them back again at a lower price there might be some thing said in favour of letting them go, but we should not sell Wheal Agar shares on such an assumption.

South Frances is improving, and it is well known that the mine will occupy an enviable position. As to West Basset, it would be satisfactory if the committee could give the public some idea as to the probable rate of dividend in the future. The dividend at the last meeting was certainly disappointing. Continued disappointment is caused by Polberro capital being 20,000*l.* instead of 40,000*l.*, but it may be fair to assume that the promoters know their own business best. There is a numerous class of persons to-day who seem to think they are called upon to attend to everybody's business but their own, and perhaps it would be as well if they allowed Polberro to now stand on her merits, which are not inconsiderable. We shall shortly probably hear more about the St. Agnes district, and altogether the prospects in every direction appear to be cheery. Cook's Kitchen, West Frances, New Cook's Kitchen, Wheal Peevor, and some others are watched with intense interest, and there are not a few who are waiting for the proper time to slip in. Perhaps when such time arrives they may find it impossible to buy the shares.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,

MINEOWNERS, STOCK AND SHARE DEALERS, &c

1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Nearly twenty years ago the weekly information which had previously been published for a great number of years in WATSON BROTHERS' Mining [Circular was transferred to the columns of the *Mining Journal*, with the following announcement.

In the year 1843, when mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, published annually in the *Mining Journal* for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring th success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and sharedealing than there is at present; and from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services and advice to all connected with mines and mining.

Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

The great extension of mining business, the difficulty so often complained of by country shareholders in getting accurate and disinterested information as to the state of Cornish and Foreign Mines, and of the financial and real position of mining companies generally, have induced Messrs. WATSON BROTHERS to make their Circular now published in the *Mining Journal* more extensively known, and to state—

That they issue daily to clients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of Mining Shares up to Four o'clock.

They also buy and sell shares for immediate cash, for the usual fortnightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charge for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in on the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

Messrs. WATSON BROTHERS take this opportunity of stating that on July 1 they took into partnership Mr. H. J. DEAN, who has been for a number of years associated with the firm, and Mr. W. H. H. WATSON, who has had some years experience of practical mining and engineering in Cornwall, and is the son of the senior partner. The firm will still be called that of "Watson Brothers."

The number of weekly communications received from almost every part of the world in regard to remarks in this Circular indicate so plainly how much they are read (and, we trust, appreciated) that they will be continued by the same writer.

Indeed, while new blood is introduced to attend to the more laborious and mechanical details of the business, the old will have more time to devote to heir different departments.

We have on more than one occasion described the transition state of the copper mines in the Redruth and Camborne districts, and the heavy drag they were upon the shareholders after the copper failed and until tin was reached. For instance, West Basset, now paying dividends from tin, was purchased by some friends of ours in 1851 for 800*l.* as a copper mine, and from 1854 to 1860 paid 126,000*l.* in dividends from copper. The mine also rose in market value to 180,000*l.* Then there was a long lawsuit about the boundary with South Frances, next the copper cut out in depth, and the shareholders getting tired, got out of it, and Cornishmen carried her on at a heavy loss through the dead ground, and the transition state from copper to tin. Now they are reaping their reward. It was the same at South Frances. We attended a meeting there in the days of punch and good dinners in 1861. It was then a copper mine, and from 1846, when it commenced paying dividends, had paid 175,000*l.* profit.

Blasting rocks with gunpowder was first adopted in Hungary in 1620. Its first introduction into England was at the Ecton Copper Mines, in Staffordshire, and by some German miners brought over by Prince Rupert. The Cornish people did not become acquainted with it till much later, when it was first used in the Lelant and St. Ives district, by two men called Bill and Case. They kept their operations a secret, allowing no one to see them charge the holes till a Zennor man hid himself behind a rock and learned the secret.

The bottom level at Cook's Kitchen has been holed to the rich winze sunk from the 320. This will lay open a valuable piece of tin ground,

The 160 west at Wheal Uny is looking better. This is the most western level, and is approaching the great cross-course, which is an important feature.

The sump below the 80 level at Carnarvon was holed to the 90 on Tuesday. This may appear a very simple announcement, but to accomplish the fact it has taken some years in time, and many thousands of pounds in money. The new shaft had to be sunk from surface to the 90 in hard ground, and then the 90 level, driven also in very hard ground to get under the sump winze, which was so rich in the 80.

We shall hope to make good returns from Carnarvon now, and the costs are very light, the mine being worked entirely by water-power which never fails. If it were not for the dull state of the market generally shares would be at 2*l.* each, and we hope to see them even higher than that before very long. There are only 17,000 shares issued and the company have about 3000*l.* in hand.

The oldest copper mine in Cornwall was Wheal Busy, which was working to a profit in 1718, and during the first working left a profit of 200,000*l.* From 1814 to 1820 it was worked as the Chacewater mine, and yielded about 20,000*l.* a year in returns.

The two ends in Prince of Wales are worth 25*l.* per fathom, and the tribute department, both for tin and copper, is improving.

Some time ago we called attention to the copper mines of Bratsberg, selecting them for favourable comment from among many concerns which were then before the public, and inviting subscribers. We are now glad to find that the English engineer sent out to the mines, and who has just returned, gives a very high opinion respecting them, The Bratsberg Company have several mines, but he values the reserves in one only at 100,000*l.*, and says that 25 men only are raising 1800*l.* worth of ore per month. Now that the company have, we presume, ample capital, it is evident that a system of energetic working should be at once adopted.

The Arendal Mine promises to send over 400 tons per month, which ought to leave a good profit.

At Kirkmichael the lode in the 20 end south has increased to 4 ft. wide, with lead throughout; this end is now in the ground between the small and large cross-courses, and a good discovery may be made any day. In the 20 north a stope has been set worth 10 cwts. to the fathom; 20 south, 15 cwts. to the fathom.

Clementina (part of Gwydyr Amalgamated) is looking very promising, and considering the large quantity of lead sold down to the 25 level, we hope soon to get into something good below the 35.

The holiday season is generally a dull one for business; and it is more than usually dull this year. In fact there is no business doing, and it is useless forcing shares for sale. When low prices rule, or when shares are knocked down through a pressure of sales, and not from any changes in the mines, it is the time to *buy*.

We formed a company to work Herodsfoot in 1845 in 256 shares of 5*l.*, all coming in alike. The shares were afterwards subdivided and rose to 40*l.* each. Large dividends were also paid. The original Herodsfoot shaft is now North Herodsfoot, worked dry, and looking as though it might pay well ere long. "Herodsfoot" in on the south ground

GRYLLS'S ANNUAL MINING SHEET,

FROM JUNE 30, 1880, TO JUNE 30, 1881,

Containing the Quantity of Copper Ore sold from each Mine, British and Foreign—Average Price per 21 cwts. and the Amount of Money—The Average Standard, Produce, and Price for the Year, both in Cornwall and Wales—The Total Amount of Ore, Fine Copper, and Money—Each Company's Purchase—And the Particulars of Copper Ores sold at the Ticketings in Cornwall from June 30, 1862, to June 30, 1881:—

CORNWALL.	Ore—cwts.	Amount.	Price.
Agar, Wheal	13	£ 54 18 6	£4 4 6
Bedford United Mines	658	2,036 12 6	3 3 0
Botallack	160	1,062 0 6	6 13 0
Carn Brea Mines	33	93 4 6	2 16 6
Carn Camborne	40	175 0 0	4 7 6
Cathedral	10	40 15 0	4 1 6
Comford, Wheal	43	175 0 0	4 1 6
Comford & North Tresavean	22	78 2 0	3 11 0
Cotehill Consols	6	21 18 0	3 13 0
Crebor, Wheal	3,033	10,722 17 6	8 9 6
Devon Great Consols	10,269	21,107 4 0	2 1 0
East Caradon	89	438 16 0	2 18 6
East Crebor	40	251 0 0	6 10 6
East Pool	1,149	2,916 12 0	2 11 0
Gawton Copper Mine	237	615 12 6	2 12 0
Glasgow Caradon	1,240	4,586 17 0	3 14 0
Great Crinnis and Carlyon	80	372 8 0	4 13 0
Gunnis Lake	2,350	13,441 16 6	5 14 6
Holmbush	32	161 1 6	5 0 6
Jewell, Wheal	137	310 1 0	2 5 6
Kitty, Wheal	15	70 2 6	4 13 6
Levant	724	5,096 2 6	7 1 0
Marke Valley	2,553	6,460 11 0	2 10 6
Mellanear	6,813	21,733 15 0	3 4 0
New Cooks Kitchen	180	1,043 18 0	5 16 6
New Fowey Consols	3	8 5 0	2 15 0
Nicholl's Ore	1	4 5 0	4 5 0
North Busy	18	57 12 0	3 4 0
Pendarves United	35	153 12 6	4 8 0
Pengelly's Ore	71	131 7 0	1 17 0
Phœnix Mines	221	1,278 11 0	5 15 6
Russell, Wheal	74	163 10 0	2 5 0
St. Aubyn United	6	27 9 0	4 11 6
South Caradon	5,410	25,904 0 0	4 15 0
South Condurrow	63	227 2 6	3 12 0
South Wheal Crofty	65	246 2 6	3 17 6
South Devon United	1,962	5,282 2 6	2 14 0
Trevince Consols	40	26 10 0	0 13 0
West Basset	25	81 7 6	3 5 6
West Caradon	150	538 8 0	3 11 6
West Seton	554	2,814 6 0	3 15 6
West Tolgus	2,459	13,055 13 0	5 6 0
WALES.			
Arendal Ore	629	£2,357 18 6	£3 15 0
Australian Ore	7	65 5 6	9 6 6
Bampfylde	7	27 2 6	3 17 6
Berehaven	2,259	11,867 8 6	5 4 6
Betts Cove Ore	14,442	61,021 13 6	4 4 6
Burnt Ore	1,099	809 10 0	0 14 6
Bugatta Ore	32	449 12 0	14 1 0
Cambrian Ore	153	1,039 15 0	6 16 0
Carracedo Ore	110	801 7 0	7 5 6
Caviera Ore	3,622	15,237 4 6	4 4 0
Copper Ore	293	2,253 17 0	10 17 0
Copper Precipitate	18	486 19 0	27 1 0
Copper Regulus	24	327 2 0	13 2 6
Copper Residue	7	65 14 0	9 8 0
Copper Slime	8	107 15 0	13 9 6
Cuba Precipitate	55	1,584 10 0	28 16 0
Cronebane	25	612 0 0	24 9 6
Garonne Ore	173	635 15 6	3 13 6
Italian Ore	64	521 8 0	8 3 0
Laque lo Abarco Ore	61	705 2 0	11 11 0
Mid Devon Ore	39	229 19 0	5 18 0
Moonta Ore	109	1,363 14 0	12 10 0
Mosterdeira Ore	174	841 5 6	4 16 6
Negrillo Ore	23	58 2 0	2 1 6
Peruvian Ore	179	2,393 2 0	13 7 6
Sobral Ore	133	1,122 4 6	8 2 6
Tan-y-Bwlch	76	569 19 6	7 10 0
Tigrony	20	262 9 0	13 2 6
Union Ore	789	4,013 11 6	5 4 6
Vigsnaes Regulus	227	2,970 5 0	13 1 6
Virneberg Ore	750	5,491 2 6	7 6 6

Copper Ores sold in Cornwall, from June 30, 1880, to June 30, 1881.

Copper ores ..... 41,133 (21 cwts.) | Average produce 6⅝
Fine copper ..... 2744 tons 17 cwts. | Average standard £93 7 0
Amount of money ... £143,034 11s. 6d. | Average price 3 9 6
Compared with the previous year,
Copper ores—increase ... 608 (21 cwts.) | Fine copper—decrease ... 38 tons 3 cwts
Amount of money—decrease ..... £9817 17s. 6d.

Copper Ores sold in Wales, from June 30, 1880, to June 30, 1881.

Copper ores .. .. 25,519 (21 cwts.) | Average produce 8¼
Fine copper ..... 2102 tons 10 cwts. | Average standard £84 10 0
Amount of money ..... £120,298 0s. 6d. | Average price 4 14 6
Compared with the previous year,
Copper ores—decrease ... 1899 (21 cwts.) | Fine copper—decrease 503 tons 11 cwts.
Amount of money—decrease ..... £37,556 11s.

Totals in Cornwall and Wales:—

Copper ores ..... 66,652 (21 cwts.) | Fine copper ..... 4847 tons 7 cwts.
Amount of money ..... £263,382 12s.
Compared with the previous year,
Copper ores—decrease ... 1291 (21 cwts.) | Fine copper—decrease 541 tons 14 cwts.
Amount of money—decrease ..... £47,374 8s. 6d.

Copper Ores purchased by the Copper Companies, from June 30, 1880, to June 30, 1881:—

Purchasers.	Ore (21 cwts.).	Tons copper.	Amount.
Vivian and Sons	13,031	922 19	£49,432 13 2
Pascoe Grenfell and Sons	9,531	686 19	36,977 13 9
Nevill, Druce, and Co.	9,180	633 10	33,038 2 1
Williams, Foster, and Co.	15,203	1147 17	62,764 11 4
Copper Miners' Company	4,538	353 3	20,344 2 4
Mason and Elkington	4,544	301 3	16,235 8 0
C. Lambert	6,352	467 19	25,563 7 9
Landore Smelting Company	2,946	249 7	14,210 5 7
Cape Copper Mining Company	1272	84 18	4,766 3 0

Copper Ores sold at the Ticketings in Cornwall, from June 30, 1862, to June 30, 1881.

Date.	Ore 21 cwts.)	Money.	Produce.	Standard.
1862	185,682	£977,017 2 6	6¼	£127 13 0
1863	176,285	872,474 4 6	6⅛	120 9 0
1864	166,707	853,586 1 0	6¼	124 17 0
1865	164,940	806,833 10 0	6⅛	125 3 0
1866	148,777	678,641 3 0	6⅛	118 7 0
1867	125,679	547,689 8 6	6⅛	107 1 0
1868	121,815	554,029 19 0	6⅛	110 15 0
1869	103,199	430,749 10 6	6¾	103 3 0
1870	90,227	374,612 0 6	7	98 12 6
1871	74,367	292,122 4 6	6⅛	99 11 0
1872	67,543	316 213 1 9	6½	114 17 0
1873	61,715	271,036 10 0	6½	110 5 0
1674	51,327	219,218 8 6	7⅛	97 16 0
1875	47,856	239,159 14 0	7	110 0 0
1876	57,173	277,630 18 6	6¼	113 8 0
1877	54,600	250,354 4 6	6¼	103 3 0
1878	51,447	187,340 13 6	7	90 15 6
1879	44,733	148,157 8 0	7	86 14 0
1880	40,525	152,902 9 0	6⅞	95 0 0
1881	41,133	143,034 11 6	6⅛	93 7 0

Messrs. HARRINGTON, HORAN, and Co. (Liverpool, July 15).—Chili copper charters for the first part of this month were advised on July 13 as 1100 tons fine, consisting of 550 tons bars and ingots, 550 tons ores and regulus, all for England. Since June 30 the fluctuations in the price of Chili bars have been only slight, and over 2000 tons changed hands at from 53*l.* 10s. to 59*l.* 10s., according to prompt and brand. Market closes dull with sellers of good ordinary brands on the spot at 58*l.* 15s. In furnace material a considerable business has been done, and the sales comprise 427 tons Bolivian ore and 306 tons Bolivian regulus, ex Beta, at Swansea, at 11s. 9d. all round, 3000 tons Newfoundland ore at 11s. 3d. to 11s. 2d., 659 tons Mason's Spanish precipitate at 11s. 9d., 1500 tons Rio Tinto and 200 tons English at 12s., and at the Swansea sale, by tender, 976 tons, average produce 8⅛ per cent., realised 10s. 8½d. per unit. Import of Chili copper during the past fortnight, 1992 tons fine, against 470 tons fine same time last year; delivery, 1607 tons fine, against 1017 tons fine same time last year. Import of other copper during the past fortnight, 1420 tons fine; delivery, 1634 tons fine. Arrivals here during the fortnight of West Coast, S.A., produce:—Beatrice, from Valparaiso, 48 tons regulus, 30 tons bars; Rising Star, from Valparaiso, 4 tons regulus, 153 tons bars; Kildonan, from Guayacan, 300 tons bars; Iberia, from Valparaiso, &c., 400 tons bars, 290 tons ingots. At Swansea—Lungland, from Totoralillo, 725 tons regulus, 246 tons bars; Beta, from Tocopilla, 305 tons regulus. Stocks of copper (Chilian and Bolivian), in first and second hands, likely to be available, we estimate at—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	—	113	18,099	492	—
Swansea	—	3,760	10,537	—	—
Total	—	3,873	28,626	492	—

Representing about 30,850 tons fine copper, against 33,475 tons June 30; 32,953 tons July 15, 1880; 30,365 tons July 15, 1879; 21,479 tons July 15, 1878. Stock of copper contained in other foreign ore and Spanish precipitate, 1907 tons fine, against 3468 tons July 15, 1880. Stock of Chili bars and ingots in Havre, 4522 tons fine, against 4495 tons July 15, 1880. Stock of Coro Coro barilla in Havre, 326 tons fine, against 73 tons July 15, 1880. Stock of copper other than Chili in Havre, 1070 tons fine, against 650 tons July 15, 1880. Stock of Chili copper afloat and chartered for to date, 11,000 tons fine, against 16,500 tons July 15, 1880. Stock of foreign copper in London, chiefly Australian, 8900 tons fine, against 6164 tons July 15, 1880. According to the Board of Trade Returns the total imports and exports into and from this country for the first six months of the following years were:—

IMPORTS.	1879.	1880.	1881.
Copper in ores ..... Tons	6,343	6,697	5,642
Copper regulus and precipitate	14,483	15,203	13,622
Bars, cakes, and ingots	22,965	20,965	14,014
In pyrites (estimated)	6,132	9,163	6,914
Total	49,923	52,028	40,192
EXPORTS.			
English copper, wrought and unwrt.. Tons	15,169	14,811	15,860
Foreign copper, unwrought	7,334	8,371	5,673
Yellow metal	8,712	7,380	7,254
Total	31,215	30,562	28,787

FOREIGN MINING AND METALLURGY.

French iron merchants find themselves in a position of some little difficulty. They had anticipated a fall in prices, and accordingly they purchased so sparingly that their stocks have become quite exhausted; and they now have to apply for re-assortments to firms which show a tendency to maintain quotations with much tenacity and firmness. Merchants' iron is now quoted in France at about 7*l.* 12s. per ton. Contracts have just been let for the delivery of rails required for the French State Railways. One of the lots (7800 tons) was obtained by the St. Chamond Forges Company at 10*l.* 4s. per ton. The five other lots, comprising altogether more than 20,000 tons, were secured by the St. Nazaire Steelworks Company, a new concern, which distances its competitors by nearly 24s. per ton. In the German Iron Trade the improvement observed of late continues, although it can scarcely be said to have increased. Pig, which is generally the basis of all improvement, has hardened slightly in value; and it is hoped that the progress thus made will become general. Merchants' iron is a little more in request, but the situation must improve greatly before it can be considered good. Rolled iron has been in somewhat better demand.

The favourable tendency which has recently characterised the Belgian iron trade appears to have become somewhat more decided. The demand is sensibly increasing, and several works have begun to issue higher price lists in consequence. Some good foreign orders have come to hand in Belgium; the result of this state of things, as well as of other circumstances, is that the Belgian works are generally well employed, and that few companies or firms have much ground for complaint. Some home business has also presented itself in Belgium, although the great mass of the orders received by Belgian firms of late appear to have come from abroad. In connection with the recent orders for locomotives, entrusted by the Paris, Lyons, and Mediterranean Railway Company to Austrian firms, an explanation is found in the fact that Austrian mechanical firms being rather badly off for orders were glad to undertake the engines in question at comparatively low rates. Another great French railway company—the Northern of France—still requires more rolling stock, and there is an impression that some of it will be ordered in Belgium. Luxembourg pig has been quoted at 37s. 6d. per ton. Charleroi pig has made 2*l.* to 2*l.* 8s. per ton. The minimum basis price for iron in Belgium is 4*l.* 16s. per ton.

There is still little intelligence to communicate with respect to the Belgian coal trade. The situation appears to exhibit a fair amount of strength, and nothing likely to occasion a change has at present occurred. When we speak of change we refer to sudden and violent change. The competition of French coal is still regarded with a little uneasiness by Belgian coalowners, who continue to complain that the French railway companies grant special tariffs and special facilities in favour of their opponents. Household coal is greatly neglected at present upon the Belgian markets, but industrial coal is sought after in almost all the Belgian districts. The favourable tone recently remarked upon some of the German coal markets seems to be becoming more general; still it does not make itself felt in any special fashion. The deliveries of German coal to the ports of the Baltic and the North Sea continue upon a considerable scale. The movement of coal to Bremen, Hamburg, and Kiel, has especially increased as compared with recent years. On the other hand, deliveries of German coal *via* the Rhine, have considerably fallen off of late. The collieries of the Saar and the Ruhr have been well employed, but in Upper Silesia business has been rather dull, and at some points stocks have increased.

In connection with Belgian mechanical and metallurgical industry it is noticed that some orders are obtained in France and Italy. The Belgian Metallurgical Company has nearly completed works in the neighbourhood of Turin; these works will be supplied with an engine of 120-horse power. Another Belgian company (the Willebroeck) has established a branch at St. Ouen. The Belgian Railway Plant (Evrard) Company is establishing itself at Valenciennes, and has become, in fact, a Franco-Belgian Company for the manufacture of engines and railway plant. The consumption of English coal at Berlin last year amounted to 230,000 tons, as compared with 195,000 tons in 1879. It appears from a semi-official statement published by the Committee of French forgemasters that the imports of iron minerals into France in May amounted to 361,537 tons, while the exports attained a total of 21,381 tons. In the imports Algeria figured for 99,528 tons, Germany for 84,293 tons, and Spain for 119,710 tons. The imports of pig and castings into France in May amounted to 86,286 tons; those of iron were 22,731 tons, and those of steel 5179 tons.

GOLD HILL (North Carolina).—Messrs. Walter Tregellas, W. Treloar, H. B. Snells, and J. D. Snells, all of England, are here. Mr. H. B. Snells is here to examine titles of property which are to be made over this week. Mr. Treloar is to have charge of work. He has a deal of experience, having superintended mining in Brazil for 30 years. The English company who have bought Gold Hill have an ample capital at their back and they promise to work the property on a very large scale. They will put in all new machinery, and devote the first few months to clearing the mines of water. As soon as they have taken out 200 ft. of water, they will put on a mining force. To start with, they will build a 40-stamp battery, and Mr. Tregellas says that as soon as the water is out they will increase it to 100 strong. On being asked how many hands would be employed he said—"We will start with a small force, but as soon as the way is clear we will run from 800 to 1000 hands. We cannot afford to run on a small scale, it pays better to run it strong.

— *Salisbury Watchman*, June 16.

PLACERVILLE GOLD QUARTZ COMPANY—THE BEST OF NEWS.—The business prosperity of Placerville, for several years to come, is more dependent on the permanent profitableness of the Placerville Gold Quartz (old Pacific) Mine than any other one thing. We are glad to learn that latest explorations on the 600 ft. level give indubitable assurance of greater richness and permanency than the most sanguine have been led to anticipate. We are informed on authority that we deem reliable that the explorations on the 600 ft level have already demonstrated that the pay chute is fully twice as long as it was at the 500 ft. level, and the end has not yet been reached, and we are assured that the average of the ore is much better than it was above; much better than any body of ore heretofore opened in that mine. The best informed and most cautious of our old miners now consider the question settled beyond all dispute that the Placerville Gold Quartz Company is entitled to rank as one of the best and most permanent quartz mines in California.—*Mountain Democrat, June 25.*

FOREIGN MINES.

ST. JOHN DEL REY MINING COMPANY (Limited). — Advices received July 18, 1881, per Mondego, dated Morro Velho, June 13:—

GENERAL OPERATIONS.—The higher gold produce for the month has been obtained by a closer assortment of the mineral received on the spalling floors.

The rejection of low grade killas has been on a large scale, which it is expected can be maintained pending the erection of the new stamps. It will be noted from the respective returns that the output is greatly in excess of the existing mill power.

GOLD PRODUCE FOR THE MONTH OF MAY.—The gold extracted during this period amounts to 26,222·2 oits., equal to 3024·0336 ozs. troy. It has been derived as follows:—

	Oits.		Tons.	Oits. per ton.
General mineral	14,943·0	from	3498 =	4·271
ditto Elephant	1,280·8	,,	187 =	6·859
ditto Praia	1,302·4	,,	322 =	4·044
Mineral free from killas	7,299·9	,,	1036 =	7·046
	24,826·1	,,	5043 =	4·922
Re-treatment	1,405·3	,,	— =	·279
Total	26,231·4	,,	5043 =	5·201

COST AND PROFIT.

Produce for May	26,231·4 oits.		
Less loss in melting	129·5 ,,		
	26,101·9 oits., at 7s. 9d. per oit.	£10,114	9 8
Cost		7,829	12 4
Profit		£ 2,284	17 4

The cost for materials is higher, especially in mine timber for the support of ections 217 C and 237 A. During the suspension of stoping operations advantage was taken to thoroughly secure this part of the mine.

MINE.—Mineral raised from the mine..... 5753 tons
Mineral quarried per borer per diem..... 1·34 ,,
Average attendance of borers daily ..... 164·84
Average attendance of natives daily ..... 348·61

MEASUREMENTS FOR THE MONTH OF MAY.

Sinking sump vertically, 6 ft. 4 in.; the appearance of the lode in the sump and at No. 1 stope west is without change; in the stope east the pure mineral is of lesser width.

Driving level south-west under roof, 12 ft. 5 in.; present direction nearly due north; the forebreast shows evident signs of improvement—small leaders of pyrites, mixed with quartz and mineralised killas.

Section 276, forebreast west, 12 ft., is still yielding low grade mineral, with a larger increase of killas.

Section 278 north, 18 ft.; there are indications of change in present forebreast.

Section 255, 12 ft. 4 in., is again in killas.

Mineral level to B shaft, 17 ft. 3 in.

MINE.—Return of duty for 13 working days:—

Mineral raised from the mine	3031 tons
Mineral quarried per borer per diem	1·40 ,,
Average attendance of borers daily	166·61
Average attendance of natives daily	354·61
Total rainfall for May	1·15 in.

EASTERN SECTION.—The condition of the lode in the sump is without change. Owing to the steady encroachment of killas towards section 299 B, it has been decided, as a temporary measure, to confine the sinking area to the pure mineral contents of the lode until further data is obtained as to the extent, direction, and value of the mineral body below this intrusion.

STOPE 277 D.—This is now fairly within the B sink zone of pure lode, from whence good mineral is now being stoped. It may be assumed that should the Quebra Panella slide maintain its present easterly dip, the area of mineral ground available for extraction is very large.

EXPLORATIONS.—No further important indications have been met with in the several exploratory cross-cuts.

In the western driving, 276, the forebreast is now in killas, by which it would appear that the westerly extension of this mineral discovery at this horizon has now been reached. As the dip of this body may, however, be found to correspond with that of the main lode, it is now being stoped away at an angle of 45°.

CUIABA.—GOLD PRODUCE FOR THE MONTH OF MAY.—668½ oits., from 263 tons, equal to 2·541 oits. per ton.

EXPENDITURE ON CAPITAL ACCOUNT.

Surface buildings and other work	£ 878	4	9
Mine, milling, and deep adit cost	685	19	4
Total cost	£1564	4	1
Less value of produce	270	3	8
Excess of expenditure	£1294	0	5

The increased cost is in a great measure due to the large quantity of first quality timber used in the erection of the revolving stamps.

The produce has again been derived from Vaz's sink.

VAZ'S SINK.—The whim required for pumping and hoisting has been completed. To communicate with the deep adit the incline depth is 28 fms., thence vertically 17 fms.

PITANGUEIRA.—Westerly extension 17 ft. 6 in. As last reported.

DEEP ADIT extended 93 ft.; this is the highest duty so far obtained with the Cranston drills.

SURFACE WORKS.—Owing to the many unpreventible—except at great cost—leaks in the main rego, and the further supply of water that will be required after the comp'etion of the second series of stamping mills, a new cutting, 1089 ft. in length, has been undertaken.

MORRO VELHO—GOLD EXTRACTED TO DATE.—The produce for the first division of June, a period of 12 days, amounts to 11,992·2 oits., equal to 1382·5054 ozs. troy. It has been derived as follows:—

	Oits.		Tons.	Oits. per ton.
General mineral	6,781·3	from	1403 =	4·826
ditto Elephant	178·6	,,	28 =	6·378
ditto Praia	824·2	,,	208 =	3·962
Mineral free from killas	3,779·0	,,	440 =	8·584
	11,563·1	,,	2079 =	5·560
Re-treatment	429·1	,,	— =	·205
Total	11,992·2	,,	2079 =	5·765

MINE.—Return of duty for 13 working days:—

Mineral raised from the mine	2611 tons.
Mineral quarried per borer per diem	1·52 ,,
Average attendance of borers daily	126·77
Average attendance of natives daily	305·07

The Gold Troop, conveying six boxes of bar gold, weighing altogether 29,464·9 oits., equal to 3396·8235 ozs. troy, was dispatched for Rio and England on the 16th instant.—N.B. The gold has duly arrived.

Telegrams received:—On June 22, dated Rio, 22nd—"Produce 12 days (first division of June, 12,000 oits.; yield, 5·8 oits. per ton; profit for the month May), 2300*l.*"

On June 30, dated Rio, 30th—"Produce 8 days (second division of June), 7750 oits.; yield, 5·2 oits. per ton."

On July 11, dated Rio, 11th—"Produce for the month (June), 30,000 oits. yield, 5·5 oits. per ton."

"Cuiaba: 250 tons stamped; yield, 2·1 oits. per ton."

DEVALA MOYAR AND RHODES REEF GOLD.—Extract from letter dated June 24 from Mr. R. Brough Smyth, the companies' resident mining engineer: All investigations tend to show that I have understood the value of the reefs in the Wynaad, and your property, in my opinion, is of enormous value.

EUREKA SILVER.—Report on the Williamsburg Mine for the weekended June 27: The north drift, in the 225 ft. level, is progressing at the rate of 9 ft. per week; total, 140 ft. from the shaft. The stope between the first and second levels is producing some good ore. We have shipped 13 tons of ore during the week, and have about 12 tons at the mine ready for shipment. We have four men at work.

JAVALI.—G. E. Chambers, June 6: The following is my report of the past month's working.—Mine: 65⅔ varas were driven in the different parts of the lode; the greater part of the stuff crushed consisted of manto from Conception and the north side of the Socorro, both of which workings still look most favourable. The whole of the mine as usual is in excellent order, and ready for the wet season.—Mill and Remittance: 25 stamps worked 23½ days, crushing 2300 tons of quartz and manto, which yielded 460 ozs. of gold, making an average of 4 dwts. per ton. We have had a few showers of rain, but not sufficient to influence in any way our water power, and I very much fear that we shall have to work with steam the whole or greater part of this month; I sincerely hope to the contrary, but still the wet season seems inclined to set in later than usual. The whole of the mill is in good working order; I have just had one of the new copper plates laid, and at a lesser incline; if I find this an improvement I will gradually alter all the other plates.—Tailings Mill: Here everything is ready to work, and I intend to make a trial next week. Our engineer has made an excellent mortar-box (or rather I should say feed-box), and I have every hope of the stamps doing very well.—Health and Labour: Dr. Birt sends his report—labour is as usual; there were rumours of a revolution, but they have passed away without doing any harm. The last three men sent out have turned out very good, and I am very satisfied with their work. Hoping to be able to make you an equally good remittance next month.

NEW QUEBRADA.—Month of May: Dispatched to the coast for shipment—Regulus from smelting works (April and May), 514 tons (about) 200·00 per cent. dry; ore from the mines, 1303 tons, 11·52 per cent. dry: total, 1817 tons. Forwarded from the mines to the smelting works, 338 tons, 7·35 per cent. dry. Home arrivals, 1127 tons; sales, 792 tons (average price per unit), 11s. 6d. per cent. dry; quantity afloat on May 31, 2006 tons; stock at the mine on May 31, 2540 tons; stock of ore and regulus on wharf at Tucacas on May 31, 5855 tons.

RUBY AND DUNDERBERG CONSOLIDATED.—Report on the mines for the week ended June 26: Dunderberg: The 700 ft. level has been advanced 16 ft. during this week; total, 510 ft. from the shaft; this level is now being run by contract at 83·95 per foot. A cross-cut has been commenced in a westerly direction on the 700 at a point 440 ft. from the shaft; progress this week, 7 ft. No. 2 ore body 55 feet below the 600 is looking well so far as encountered; at present it is about 8 ft. wide of very good quality and apparently getting larger as it goes north. A drift has been commenced from No. 2 winze at a point 100 ft. below the 600, or 50 ft. below the present No. 2 ore body, as the ore lays east of the winze at this point. No. 1 ore body above the east cross-cut on the 600 is looking exceedingly well; the ore is from 4 to 6 ft. wide of extra good quality. The west cross-cut 600, 50 ft. north of No. 5 winze has been advanced 6 ft. during the week without any change; the ore seam reported in my last has been drifted on 11 ft. northerly, and 4 southerly; the ore still continues in both ends about 1 ft. wide. No. 5 stope, north of the winze, is somewhat smaller, but is still producing nearly the usual amount of ore. This ore body is making down to the west of the 600, and I expect to cut it in the west cross-cut alluded to above. A winze has been commenced at the end of the 600, near the bottom of No. 5 winze; progress this week, 6 ft.; the ore at this point is about 5 ft. wide, and is the continuation of the same ore body followed down from the 500 to 600 through the No. 5 winze. The No. 3 above the 400 does not look so well, the ore being very low grade, a portion of it only is of sufficient value to ship. The south drift from the 300 west cross-cut has been advanced 20 ft. during the week. I expect to make connection with No. 3 during the coming week. Have shipped 161 tons of ore this week, and have 44 men, 6 contractors, and about 8 tributers at work, including those at Home Ticket.—Bullwhacker: The stope in the back of the 325 has improved considerably during the week; the ore at present is about 3 ft. wide of good quality. The winze below the 325 has been sunk 13 ft. during the week; total, 40 ft. This winze is being sunk in the footwall, as the lode lays very flat at this point. The east cross-cut from the north drift on the 325 has progressed 7 ft. during the week in very promising looking ground containing small bunches of ore. Have shipped 19 tons of ore, and have 11 men at work.

— July 19: Telegram received from Eureka to-day:—"The week's run from the furnace was $13,000 from 241 tons of ore, producing 40 tons of bullion. The shipments of the week were 239 tons.

LINARES.—July 6: In the 115, driving east of Warne's engine-shaft, there is a powerful and productive lode, worth 3 tons of ore per fathom. The 139 east and the 130, west of Warne's engine-shaft, have been hindered in consequence of a great increase of water; we are now changing the plungers, 9 in. for 11 in., and expect to resume driving in a few days. The lode in the 115, west of Warne's engine-shaft, is large, with small veins of ore in it, producing ½ ton per fathom. In the 135, driving west of Peill's engine-shaft, the lode continues very small at ½ ton per fathom. There is no improvement in the 120, driving in the same direction. The lode in the 135, driving east of Peill's engine-shaft, is small, producing ½ ton per fathom, and the ground hard for exploring. In the 120, driving east of Peill's engine-shaft, the granite is very hard and the lode poor. The 105, driving east of San Francisco shaft, is also in hard granite and the lode (valued at ½ ton per fathom) continues very small. No. 240 winze sinking below the 100, has improved very much, and is going down in a splendid shoot of ore, worth 3 tons per fathom. The usual quantity of ore was delivered into the stores during the past month, and the stopes are yielding moderately at present. The surface work is going on very steadily; the machinery is in good condition. We are putting in larger plungers at Warne's engine-shaft, and shall quickly overcome the water difficulty there. We estimate the raisings for July five weeks at 300 tons.—Quinientos Mine: The lode in the 100, driving east of Taylor's engine-shaft, is split up into small and worthless branches. In the 90, driving in the same direction, the men are now driving south towards the principal lode. The lode in the 65, driving east of Cox's shaft, is small, being valued at ¾ ton per fathom, and is not so productive as it was. In the 55, driving east of Cox's shaft, the lode, worth 1 ton per fathom, has also fallen off a little in value. We estimate the raising for July at 75 tons.

Magadahonda Mine: In the 45 driving east of Eurequita's shaft, south lode, three is a large lode with good stones of ore, worth ¾ ton per fathom. In the 70 driving east of San Francisco's shaft, north lode, the lode is small, and appears to be very regular; its present value is ¾ ton per fathom. The lode in the same level driving west of San Francisco's shaft, north lode, does not contain ore enough to value. In the 70, driving west of cross-cut on No. 3 lode, there is an open and very promising lode, producing 1 ton of ore per fathom. On taking over this concern, the engines were found to be in a very bad state The bottom of the mine was full of water; in fact, had not been seen for some time. We found it necessary to alter the machinery, which occupied a month, during which time the water rose to a considerable height. The principal engine-shaft, is now drained, which enables us to drive the above-named levels; but there are other sections of the mine not communicated with this main centre, and the water is drawn from them in barrels with great difficulty and expense. Every effort will be made to connect those detached places with the engine-shaft as early as possible.

FORTUNA.—July 6: The lode in the 120, driving west of O'Shea's engine-shaft has much improved during the past fortnight, and is now valued at 1½ ton per fathom. In the 70, driving west of San Pedro shaft, there is a strong lode, consisting of quartz, carbonate of lime, and lead ore, worth 1 ton per fathom. In the 80, driving in the same direction, the lode is open and promising, producing ¼ ton per fathom. The lode in the 90, driving west of San Pedro shaft, is strong, open, and easy for exploring, its value being 1 ton of ore per fathom. The 90, driving east of San Pedro shaft, is small and unproductive at present. The lode in the 80, driving east of San Pedro shaft, contains stones of ore, worth ½ ton per fathom, and is comparatively easy for driving through. In the 120, driving east of O'Shea's engine-shaft, there is a powerful lode, producing 1 ton of ore per fm., with a good quantity of calcareous spar. The 100, driving east of Lowndes' shaft, is in contact with a strong cross-course. The lode in the 90, driving east of Santo Toma's shaft, is compact and regular, and inexpensive for opening up, its value being ½ ton per fathom. In Navarro's winze, sinking below the 110, the lode (worth ¾ ton per fathom) is regular, but rather small at present. In Juno's winze, sinking below the same level, the granite is very hard, and the lode small and of no value.

Los Salidos: In the 175, driving west of Taylor's engine-shaft, the lode is small, and of no value. The lode in the 160, driving in the same direction, is disarranged and unproductive. In the 175, driving east of Taylor's engine-shaft, there is a compact and very promising lode, producing 1½ ton per fathom. The 160, driving east of Taylor's engine-shaft, has just passed through a strong cross-course, and is not so productive as it was; present value being 1 ton per fathom. In the 145, driving east of Taylor's engine-shaft, the granite is broken and unsettled, and the lode small and poor. In the 130, driving east of Taylor's engine-shaft, a good length of valuable lode is being laid open at 2 tons per fathom. The lode (worth ½ ton per fathom) in the 120, driving east of San Pablo's shaft, is rather small at present. The 80, driving west of Palgrave's shaft, continues unproductive. Arrogo's winze, sinking below the 120, is going down in a very fine piece of ore ground, worth 2 tons per fathom. In Pepe's winze, sinking below the 65, the lode consists of a number of small branches. The ordinary rate of weighings of ore was kept up very regularly throughout the past month, and the stopes in that time did not undergo any change of importance. The surface works are going on steadily, and the machinery is in good condition. We estimate the raisings for July (five weeks) at 350 tons.—San Anton Mine: In the 45, driving east of Henty's engine-shaft, a great length of rich lode was laid open in the past month, valued at 2 tons per fathom. The 55, driving in the same direction, fell off in value a few days since. In the 55, driving west of Henta's engine-shaft, there is a wide and strong lode, with good lumps of ore, worth 1 ton per fathom. The 45, driving west of Henty's engine-shaft, is still in contact with the elvan-course. The lode in the 30, driving west of Henty's engine-shaft, is large, and yields good stones of ore. Plata's winze, sinking below the 30, and producing ½ ton per fathom, has fallen off very much in the past fortnight. We estimate the raisings for July at 40 tons.—San Francisco Mine: The lode in the 25, driving east of the engine-shaft, is small, and contains stones of ore; the granite is very soft, and inexpensive for opening up. In the same level driving west of the engine-shaft there is also a little ore. The plunger is fixed at the bottom level, and the driving of the ends will be resumed in a few days.

ALAMILLOS.—July 6: In the 130, driving east of Taylor's engine-shaft, there is a large and strong lode, opening up paying ore-ground at 1 ton per fatham. The lode in the same level driving west of Taylor's engine-shaft is large, with good stones of ore, worth ½ ton per fathom. The 85, driving west of San Adrian's shaft, has improved, and yields good stones of ore at the bottom of the end. The lode in the 70, driving east of San Victor shaft, is large, with occasional stones of ore. In the 80, driving north of San Victor shaft, we expect to intersect the lode in a few days. In the 80 cross-cut, south of San Victor's shaft, the granite is very hard. The lode in the 70, driving west of San Victor's shaft (worth ½ ton per fathom), has fallen off in value during the past fortnight. The 50, driving west of Judd's cross-cut, has also changed unfavourably. San Felipe's shaft, sinking below the 50, is off the lode. In Gomez winze, sinking below the 115, the lode has improved within the past week to 1½ ton per fathom, Emilio's winze, sinking below the 60, is deep enough for the 70, and the men will drive both east and west from the bottom of it. Eusebio's winze, sinking below the 20, and valued at 1 ton per fathom, is not so productive as it was a short time since. The weekly weighings are were kept up very steadily during the past month, and the stopes are without any important change at present. The ordinary surface work is going on regularly, and the machinery is in excellent condition, We estimate the raisings for July at 200 tons.

BUENA VENTURA.—July 6: The lode in the 40, driving east of Cox's engine-shaft, is disarranged and unproductive. The 50, driving west of Cox's engine-shaft, has improved, and yields good stones of ore. The 40, driving in the same direction, is also turning out good orestuff. In the 20, driving east of Taylor's engine-shaft, a good length of fairly productive lode has been laid open, worth 1½ ton per fm. The 30, driving east of Taylor's engine-shaft, is opening up ore ground valued at ½ ton per fathom, that will be worked at a profit. In the same level, driving west of Taylor's engine-shaft, the lode is small and unproductive. The surface works are kept on very steadily, and the buildings of the new engine and boiler houses, except the stack, well nigh completed. The different tribute bargains are yielding very well, which make our raisings altogether a little over 50 tons per month.

PORT PHILLIP AND COLONIAL GOLD.—The directore have received the following advices, dated June 4: Total quantity of quartz crushed for the month ending May 18 3117 tons; total gold obtained 732 ozs. 13 dwts.; yield per ton, including pyrites, 4 dwts. 16 grs. Receipts (including 1293*l.* 2s. 4d. obtained from tributers), 1824*l.* 14s.; payments (including 311*l.* paid for firewood), 1752*l.* 7s. 4d.; profit, 72*l.* 6s. 8d., which added to the previous balance made a total of 1625*l.* 14s. 9d., which was carried forward to next month's account.

VICTORIA (London).—The directors have received advices dated June 4 iving the results of the operations of the South Clunes Mine for the month nding April 8. Total quantity of quartz crushed, 3704 tons. Total gold obained, 754 ozs. 16 dwts. Average per ton, 4 dwts. 1 gr. Receipts, 1889*l.* 12s. 11d. Mine costs, 1732*l.* 13s. 6d. Profit, 156*l.* 19s. 5d.

SCOTTISH-AUSTRALIAN.—The directors have received advices from the manager at Sydney, dated June 4 last:—He reports that competition amongst the northern collieries continued, and that the price had been reduced to 7s. a ton; but that he considered it preferable to keep the company's coal in the ground for a time rather than to sell it at that price, and that he continued to charge 8s. a ton for Lambton coal, the sales of which consequently were much less than they would be under ordinary circumstances, having amounted in April to 8117 tons, and in May to 9674 tons. Efforts were being made to bring about a better understanding between the various collieries, but the manager, while endeavouring to promote this end, was unable at the date of writing to report a definite result.

YORKE PENINSULA.—The directors have received advices from the committee of inspection at Adelaide, with reports from the Kurilla Mine to June 7 last. The following are extracts from the report of Thomas and John Anthony: "Kurilla Lode: The 67, east of Hall's, continues to lay open paying ground. The winze mentioned in our last monthly report has been holed from the 55 to the 67 and a stope set. We continue to drive south at the 55, not yet having cut the south branch of the lode, nor is the winze from the 45 to the 55 as yet holed. The winze from the 35 to the 45 on the south branch is now about 8 fms. deep. At the 15 east, driving west of the cross-cut, we are following up a paying lode of great regularity. At the present it is heading for A shaft, where Anthony's lode was supposed to exist, but which, in going west, did not seem to be a distinct lode of any value. At the 10, in New Section 398, we drove south and cut the lode on which its former owners drove west from their workings about Gurner's shaft. We drove east on cutting this lode, and have holed to their western trial shaft, letting down the water to that level. On the completion of this work we resumed driving east at the 15, where a paying lode is being followed. The accompanying rough sketch will show the relative position of the last-mentioned places to Gurner's shaft, as well as demonstrate what we have before called attention to—that the works on Section 398, carried on by the late Devon Company, are not on our Kurilla lode, but south of it. . . . We have newly timbered the hauling-shaft from the surface to the 25, and have resumed driving east at that level to get under the ore ground discovered by the 15. It will be remembered that we drove a short cross-cut south at the extreme end of the 25 and cut into a good lode, but have been unable until now to proceed to extend the drive for want of a discharge shaft, the timber in the hauling shaft having perished from dry rot.—Morphett's Lode: At the 55 east the lode is worth 2½ tons of 16 per cent. ore per fathom. At the 55 west the lode is again making ore in paying quantity, although hard for working. We have not found ore so far west in the upper drives, and it may be that as greater depths are reached much greater length of ore ground may be found. We have cut the north branch at the 55 east, and like the upper levels, it is a paying lode close to the cross-course, but it yet remains to be seen if the ore will extend. At the 43 east we have removed the men from the south part of the lode, and shall drive on the north part, where a pare of tributers are making the drive, hidden by a mere film. . . . The 55, west of Morphett's, and the 15, east of Hall's (partly in Section 393) are adding very materially to our ore reserves.—Ore Returns: 217 tons of ore had been sold in the colony. The heavy rains had delayed the making up of the usual returns of ore on hand at the mine, and these had not reached Adelaide at the date of the departure of the mail.

ENGLISH-AUSTRALIAN GOLD.—Mr. Mark Pollard, Fryerstown, June 6: 320 ft. level: This drive has been extended 20 ft. during the month without change in the ground. Still a little quartz in the flookan, but very small. I have removed the men from this drive to the stopes 40 ft. below this level on the lode, and the two men from the 70 at the prospecting shaft, as I am short of quartz at the 150, that is to say, they will be stoping from the No. 1 rise on the junction of the slide and the lode from the 420.—232 ft. level: In rising from the back of this level I have met with quartz 6 ft. thick; see a little gold in it; shall commence to stope north and south as soon as we connect this rise with the 180.—207 ft. level; Stoping north from No. 1 rise, the quartz is dipping north. I am thinking to remove the men from these stopes about 40 ft. lower down to drive north from this rise to meet with the stone that went under foot in the north drive, which we were driving some time ago.—180 ft. level: The stopes at this level are looking just the same. These stopes are payable. The block of stone marked 10 in the same run of country is also payable.—150 feet level: The quartz at the back of this level is very small on the south end of the stopes, but I think there is a large body of stone making over the north end of our workings. I have put up a rise 6 ft. within the last day or two, have not got at the top as yet. We have crushed 844 tons of stone this month from the different stopes with the result 113 ozs. retorted gold. I can only account for its poorness by having worked a block of stone on the western side of the stopes in the 150 before I filled up the ground, as I did not like to cover it up. The gold sold, 114 ozs. 3 dwts. 19 grs., realised 441*l.* 1s. 1d.; magnetic iron sold 7*l.* 10s. 6d.; about 23 tons of pyrites sold, 4*l.* 5s. per ton, 97*l.* 15s.; total receipts, 546*l.* 6s. 7d. The payments for wages and sundries during the month were 526*l.*, leaving a profit of (estimated) 20*l.* 6s. 7d.

Registration of New Companies.

The following joint stock companies have been duly registered:—

WEST DRAYTON CEMENT COMPANY (Limited).—Capital 20,000*l.*, in shares of 1*l.* To acquire and carry on the business at above place. The subscribers (who take one share each) are—E. B. Steward, West Drayton; S. P. Freeman, 12, Queen-street; E. H. Wilkinson, 14, Dowgate Hill; E. Hutchinson, Bishop Auckland; J. J. McDermit, Bishop Auckland; T. Gale, Haughton; J. Henderson, Bishop Auckland.

THE CWM AVON ESTATE AND WORKS (Limited).—Capital 200,000*l.*, in shares of 10*l.* To adopt and carry into effect an agreement made between James Shaw of the one part, and the company of the other, for the acquisition by purchase of the Cwm Avon estate, situated in the county of Glamorgan, to work and develope the mines and minerals connected therewith, and generally to carry on the business of mineowners and colliery proprietors in all branches. The subscribers (who take one share each) are—James Shaw, Cwn Avon, mineowner; A. J. Shaw, Cwm Avon, colliery proprietor; W. T. Howe, 4, St-Helen's Place, iron merchant; G. E. Taunton, Coldham Hall, gentleman; W. H. Wand, Dinas, mining engineer; J. Dixon, 1, Laurence Pountney Hill, merchant; A. A. Buck, 59, Mark-lane, commission merchant. A director's qualification shall be stock or shares to the value of 200*l.* Remuneration 500*l.*, to be divided amongst the members of the board.

THE GOLD AND SILVER MINING SHARE TRUST (Limited).—Capital 2000*l.*, in shares of 5*l.* To acquire Acts authorising the working of gold and silver mines; to sell, re-sell, or otherwise dispose of same, or equip, work, and develope any of the properties of the company. The subscribers (who take one share each) are—J. J. Fleming, Clapton; C. Berry, Gresham House; P. R. Oppenheim. 82, Gresham House; N. Sohnorrenberg, 59, Bishopsgate-street Within; O. Consserandt, 16, Huntley-street; J. L. Yuly, 5, Great Winchester-street; L. Jeyes, 9, Victoria Chambers. No Articles of Association have been registered.

THE SOUTH AMERICAN LAND COMPANY (Limited). — Capital 100,000*l.*, in shares of 100*l.* To carry on a land and estate company's business in all branches The subscribers (who take one share each) are—E. Griggs, Finchley; H. W. Burnside, 29, Ifield-road; A. R. H. Mackey, East Dulwich; T. O. Chapman, 245, Junction-road; H. Watts, Wimbledon; J. Ely, Dalston; R. Griggs, West Ham.

THE MERIONETH MINING AGENCY COMPANY (Limited).—Capital 15,000*l.*, in shares of 1*l.* To adopt and carrying into effect two agreements, one made between T. A. Readwin and A. Hathorn of the one part, and J. Cruikshank for the company, for acquiring the exclusive right of using and working a certain invention or secret process for the treatment of metallic ores and minerals at the mining property known as Glasdirissa, near Dolgelly, Merioneth. The other agreement is made between J. Cruikshank and G. H. Brown. To acquire by purchase or otherwise, develope, open up, and work any mines in the United Kingdom or elsewhere, producing copper, silver, gold, or other ores, together with any plant, buildings, machinery, timber, &c., belonging thereto. The subscribers (who take one share each) are—S. E. H. Walmisby, Sydenham, merchant; J. A. Black, Beckenham, clerk; R. Bowton, 2, Church-court, agent; F. A. Sands, The Albany, gentleman; G, H. Potts, 55, Caversham-road, secretary; C. J. Potts, 20, Lower Kennington-lane, clerk; E. Brambleby, 7, Union-court, clerk. The subscribers will determine the names of directors. Each shareholder is qualified to be a director.

THE NEW LLYNCLYS LEAD, COPPER, AND OXIDE SYNDICATE MINING COMPANY (Limited).—Capital 6000*l.*, in shares of 2*l.* To purchase or otherwise acquire for any estate the mines, mineral properties, minerals, and ores known as the New Llynclys Lead, Copper, and Oxide Syndicate Mining Company (Limited), in the parish of Llanyblodwell, county of Salop, with all rights, privileges, machinery, implements, and effects appertaining thereto The working of mines and minerals, and carrying on generally the business of miners, smelters, and quarriers. The subscribers are—J. Sennett, Peckham, M.E., 5; W. Williams, 51, Shepherd's-walk, accountant, 5; M. Evans, 118, Cannon-street, wine merchant, 3; M. Moore, 118, Cannon-street, no occupation, 3; W. H. Smith, 167, Stepney-green, 5; T. Vosper, 2, Stoke Newington, gentleman, 5: R. Hedfer, 19, Leicester-square, accountant, 5.

THE CHAMBER OF AGRICULTURE JOURNAL AND AGENCY COMPANY (Limited).—Capital 10,000*l.*, in shares of 1*l.* To acquire the assets and liabilities of a company, and to carry on the business of newspaper proprietors, booksellers, publishers, printers, &c. The subscribers (who take one share each) are—P. G. Craigie, Hampstead; W. Pickering, 21, Arundel-street; T. Denkham, Ross; A. Pell, Hazelbeach; R. H. Paget, Shepston Mallet; Sir M. Lopez, 28, Grosvenor Gardens; J. Hemsley, Shelton, Newark.

LONDON, EDINBURGH, AND GLASGOW ASSURANCE COMPANY (Limited).—Capital 250,000*l.*, in shares of 1*l.* To carry on an assurance business in all branches. The subscribers are: H. G. Ashurst, 9, Fenchurch-street, 500; J. S. Balfour, Croydon, 500; S. H. Booth, Kilburn, 500; S. R. Pattison, 11, Queen Victoria-street, 500; W. A. Bowen, 72, Bishopsgate-street Within, 500; S. Walcott, 17, Lansdown Crescent, 500; W. E. Bayley, 9, Lawrence Pountney Hill, 300; H. W. H. Rance, 9, Lawrence Pountney Hill, 200; R. E. Thompson, 9, Crawley Place, 250.

THE NORTH-EASTERN STEEL COMPANY (Limited).—Capital 250,000*l.*, in shares of 20*l.* To carry on the trades of steel converters and steel and iron manufacturers, engineers, iron masters, &c. The subscribers (who take one share each) are—A. S. Hay, 34, Old Broad-street; E. Oxherson, 34, Old Broad-street; F. W. Bond, 117, Leadenhall-street; S. G. Thomas, Palace Chambers; C. C. Turnhill, 117, Leadenhall-street; W. R. Hay, 34, Old Broad-street; E. Riley, 2, City-road.

MILITARY INVENTIONS COMPANY (Limited).—Capital 50,000*l.*, in shares of 5*l.* To acquire inventions, improvements, and patents relating to ordnance, arms, ammunition, &c., and to carry on a manufacturing business in relation to such inventions, &c. The subscribers (who take one share each) are—E. J. Chartey, 24, Hogarth-road; B. S. Ross, 46, Baron's Court-road; T. A. Middleton, 17, Loman-street; G. McBatten, 9, Grosvenor Mansions; R. H Mitford, Fulham; R. Morris, Lewisham; C. P. Thornsbury, 17, Loman-street.

THE COLEBROOKDALE COMPANY (Limited).—Capital 250,000*l.*, in shares of 250*l.* and 100*l.* To acquire by purchase or otherwise the good will, business, property, plant, stock, machinery, and effects of the firm styled the Colebrookdale Company, for the purpose of carrying on the trades of miners, coal and ironmasters in the various branches. The subscribers are—A. E. W. Darley, Shrewsbury, 5; T. Tothill, Bristol, 5; W. G. Norris, Colebrookdale, 5; J. Robinson, 7, Laurence Pountney Hill, 1; W. Tothill, Stoke Bishops, 1; M. F. Darley, Treberfyd, 1; T. A. Weltin, 5, Moorgate-street, 1. Messrs. A. E. W. Darley, T. Tothill, and W. G. Norris shall be the first directors, the qualification being fixed at shares representing the value of 1250*l.*

EVERITT ADAMS AND COMPANY (Limited).—Capital 100,000*l.*, in shares of 10*l.* To carry on the business of general agricultural engineers, makers, manufacturers, and dealers in engines, machinery, &c. The subscribers (who take one share each) are—N. Trouson, Bromley; N. M. Wylie, 27, Beaufort Gardens; F. M. Brocklebank, Lewisham; F. M. Cooper, 23, Charlewood-street; G. W. Peters, Moorfields; R. Barham, 1, Greenhithe; D. M. Sutherland, 14, Francis Terrace.

STALEYBRIDGE COTTON MILL COMPANY (Limited).—Capital 60,000*l.*, in shares of 5*l.* To carry on a cotton-spinner's business in all branches. The subscribers are—T. H. Bottomley, Stalybridge, 1; R. Heap, Stalybridge, 1; J. Redyard, Stalybridge, 1; J. Rowles, Stalybridge, 1; J. Turner, Stalybridge, 1; J. Heap, Stalybridge, 1; E. Buckley, Stalybridge, 1; W. T. Watts, Stalybridge, 1; N. Ives, Staleybridge, 21; R. Byrom, Stalybridge, 1.

THE COTCHELE COMPANY (Limited).—Capital 25,000*l.*, in shares of 1*l.* The purchasing of the benefit of an indenture made between the Earl of Mount Edgcumbe of the one part and Horatio Nelson Lay of the other, and the acquisition by purchase or otherwise of any other mineral properties, mining rights or privileges, machinery, rolling and other stock, plant, &c. To work the mines and prepare the produce thereof for the market. To buy, sell, smelt, refine and deal in ores, metals and minerals of all kinds. The subscribers (who take one share each) are—A. Spencer, Barnsbury, clerk; F. Reel, 51, Boyson-road, clerk; J. M'N. Latto, 45, Lausanne-road, clerk; H. F. Brazier, Romford, clerk; H. E. Daw, 3, Granville-square, clerk; W. Allen, Camberwell, accountant; A. Fathercole, Brixton, clerk. No shares shall be bought by or on behalf of the company. The following are the first directors—H. N. Lay, E. J. Leveson, and F. R. Wilson, the qualification being fixed at 150 shares.

THE BIRMINGHAM AND ASTON TRAMWAYS COMPANY (Limited).—Capital 50,000*l.*, in shares of 5*l.* To construct, lay down, maintain, and work tramways. The subscribers (who take one share each) are—E. B. Pritchard, Birmingham; W. Southall, Edgbaston; J. Wilson, Birmingham; E. Castle, Birmingham; G. E. Fletcher, Edgbaston; H. L. Smith, Edgbaston; J. James, Edgbaston.

THE "STANDARD" FORGED HORSE NAIL COMPANY (Limited).—Capital 25,000*l.*, in shares of 1*l.* To manufacture, sell, and deal in horse nails in connection with certain acquired patents. The subscribers (who take one share each) are—J. Barber, Leeds; A. C. Peake, Leeds; W. Worthington, Wigan; J. Priestley, Bolton; W. W. Clark, Birmingham; H. Stephenson, 26, Suffolk-street; O. G. Lamberd, 7, Albermarle-street.

MALAGO VALE OCHRE, OXIDES, UMBER, AND BARYTES LAVAGATING COMPANY (Limited).—Capital 20,000*l.*, in shares of 5*l.* To purchase or otherwise acquire a certain property at Bedminster, near Bristol. To buy, sell, and carry on the business of a manufacturer and vendor of coal, coke, iron ores, gypsum, manganese, ochres, oxides, umbers, and barytes, to get, win, manufacture, and deal in minerals, clays, &c., and generally to carry on all business incidental to the foregoing. The subscribers (who take one share each) are—C. Crole-Rees, Loftus-road; T. Rees, 43, Cornwall-road; F. R. Lloyd, Suffolk-lane; G. Elli, Anerley; J. L. Soutter, 13, Cullum-street; J. Rhind, Kilburn; P. Page, South Norwood.

THE EASTERN ELECTRIC LIGHT AND POWER COMPANY (Limited).—Capital 250,000*l.*, in shares of 5*l.* Acquiring and working patents connected with the application of electricity for lighting, plating, and other purposes. The subscribers (who take 100 shares each) are—E. Noel, 29, Grosvenor-square; J. Pender, Brook Hall; L. Clark, 6, Westminster Chambers; C. H. Strutt, 2, Harrington Gardens; A. McArthur, 19, Silk-street; Sir A. T. Cunninghame, 10, Eaton-terrace; H. D. Abbott, Southsea.

THE KIANDRA GOLD MINING COMPANY (Limited). — Capital 150,000*l.*, in shares of 1*l.* To purchase or otherwise acquire lands, estates, and mining properties in New South Wales, and in particular some 65 acres known as the "Empress," "Emperor," "Homeward Bound Gold Mines," and the "Cornishman's Claim," situate in Tunnet and Adelong district, county of Selwin, in said colony. To improve and cultivate the properties, and generally to carry on the business of a gold mining company in all branches. The subscribers (who take one share each) are—A. Leared, Wood Green, private secretary; J. Palmer, 29, St. George's-road, clerk; E. W. Moir, Glasgow, engineer; T. W. Martin, 2, George-street, secretary; R. Buck, South Norwood, accountant H. W. Lamb, Anerley, no occupation; J. R. Morris, 2, George-street, clerk. The first directors are—Messrs. Bennoch, J. Croyle, H. W. Lamb, J. Proctor, C. J. Harvey, and R. M. Robertson.

THE EXPLORATION AND MINING COMPANY OF NEW SOUTH WALES (Limited).—Capital 100,000*l.*, in shares of 100*l.* To explore in any parts of Australasia and elsewhere, and to acquire by purchase or otherwise open, develope, work, maintain, or sell any mines, minerals, mining or other properties of the company, and generally to carry on the business of miners, quarrymen, smelters and refiners of ores, engineers, manufacturers of mineral or metallic produce, &c. The subscribers (who take one share each) are—G. Mautrey, 78, Hatton Garden, metallurgist; J. T. Courtnay, 3, Plowden Buildings, barrister; P. Lubolitz, 21, Mincing-lane, merchant; J. S. Setton, 78, Hatton Garden, metallurgist; E. Matthey, 78, Hatton Garden, metallurgist; S. Meltor, Manchester, metallurgist; J. Grossmith, 21, Mincing-lane, merchant. Every member holding one share shall be eligible as a director, the subscribers determining the names of the first.

THE LLAY HALL COAL AND CLAY WORKS COMPANY (Limited). —Capital 100,000*l.*, in shares of 10*l.* To acquire, assume, or undertake the property, business, rights, assets and liabilities of a company of the same name, and to carry on the trade of miners, colliery proprietors, coke, brick, and tile manufacturers, smelters, ironmasters, and manufacturers, ironfounders, &c. The subscribers (who take one share each) are—F. Bennoch, 5, Tavistock-square, merchant; A. Scott, 6½, Austin Friars, merchant; D. Bonar, 53, Wilbeck-street, merchant; R. Luke, Birkenhead, solicitor; F. McDonnell, Monmouth, colonel; H. R. Duke, 7, Queen Victoria-street, accountant; F. S. Evans, Hackney, clerk. The directors must not be less than four or more than eight. Qualification 50 shares.

THE NORTH AND SOUTH BUCKLEY COLLIERY BRICK AND TILE COMPANY (Limited).—Capital 25,000*l.*, in shares of 5*l.* To acquire by purchase or otherwise properties situate in the parishes of Mold and Hawarden, county of Flint, to work and develope same, and to purchase the business of colliery proprietors and brick and tile manufacturers now carried on upon the said properties for the purpose of continuing same. The subscribers (who take one share each) are—C. Holland, Aintree, merchant; R. A. Rossborough, Buckley, colliery proprietor; J. D. Roberts, Leicester, merchant; W. Morris, Wavertree, solicitor; D. Evans, Moss Bank, builder; C. E. Geddes, Birkenhead, cashier; P. O. Jones, Liverpool, merchant.

THE ATLANTIC RESOLVEN SMOKELESS STEAM COAL COMPANY (Limited).—Capital 30,000*l.*, in shares of 1*l.* The acquiring, working, developing, and selling the products of two collieries situate in Glamorganshire. The subscribers (who take one share each) are—E. Jose, Hornsey; J. W. Holland, 58, Guildford-street; W. Teale, Broxbourne; R. E. Mudge, Hatcham; A. E. Taylor, St. Michael's House; C. Greenwood, Highgate; J. Silwall, 14, Walbrook; G. Williams, Neath.

LONDON TIN-PLATE PRINTING COMPANY (Limited). — Capital 10,000*l.*, in shares of 1*l.* To purchase the goodwill and stock in trade of a business at 5, Wine Office-court. and carry on same. The subscribers are—H. Matthison, 5, Wine Office-court, 200; J. B. Lambe, 199, Upper Thames-street, 100; W. H. Lloyd, 71, Globe-road, 100; J. H. Stiles, Nunhead, 100; W. F. Harrold, 31, Castle-street, 10; H. M. Hicks, 181, Fleet-street, 10; G. E. Somerville, 2, Castle-street, 20.

THE RIO MALAGON SULPHUR, COPPER, AND SILVER MINES (Limited).—Capital 200,000*l.*, in shares of 10*l.* To acquire interests in certain sulphur, copper, and silver mines and mineral properties in the Termino of Puebla del Guzman, Province of Huelva, Spain, known as the Sierracilla and Manilta Mines, and any other mining properties. To work and carry on all or any of the said mines, and to deal in, purchase, sell, or dispose of the ores, minerals, &c. The subscribers (who take one share each) are—J. Dixon, 1, Laurence Pountney Hill, C.E.; J. S. Rivolta, Blackheath, no occupation; E. Leworthy, 13, Finchley-road, secretary; H. Fleet, South Hackney, secretary; C. W. Kirk, 148, St. Paul's-road, accountant; Cremien-Javal, Bryanston-square, accountant; E. T. Tilsley, West Ham, E.C.

THE ALIANZA DE CICAPRA GOLD MINING COMPANY (Limited). —Capital 500,000*l.*, in shares of 5*l.* To acquire, work, and develope several mining and other properties constituting the undertaking of the Venezuela Company, and to purchase or otherwise acquire any other mines of gold or other metal, coal, or asphalte, mining rights and concessions in the Republic of Venezuela and the Island of Trinidad, for the purpose of carrying on mining operations in all branches. The subscribers are—T. R. Crampton, 19, Ashley-place, C.E., 100; R. Oxland, Plymouth, chemical engineer, 100; J. G. Crompton, 4, Victoria-street, C.E., 1; C. C. Fitzgerald, St. James's Hotel, C.E., 1: B. de C. Nixon, Athenæum Club, banker, 1; W. Nevitt, 38, Bishopsgate-street Within, merchant, 1; A. Bray, 6, Old Jewry, clerk, 1. The following are the first directors:—Messrs. T. R. and J. G. Crampton, Oxland, Nixon, and Nevitt. Qualification, 100 shares.

MONKLAND MINERALS COMPANY.—Mr. Wyllie Guild, who has undertaken the floating of the Monkland Minerals Company (Limited), the title which the reconstructed Monkland Iron and Coal Company (Limited) has issued a memorandum explaining fully the principles of the scheme he has projected for giving effect to that purpose. From it we find that the present property was purchased in June, 1872, for 531,368*l.* 17s. 8d. (the value of works, goodwill, and stock-in-trade, 400,000*l.* being for the works; that the capital consisted of 400,000*l.* and debenture powers to the extent of 100,000*l.*; that there has been laid out in the works and charged to capital 104,939*l.* 2s. 10d.; and that there has been written off revenue to depreciation 90,000*l.*; leaving the capital expenditure at 414,939*l.* 2s. 10d. The profits during the nine years have amounted to 292,399*l.* 19s. 10d.; but this fell short of the expenditure (which included 100,062*l.* 17s. 6d. of dividends) by 22,097*l.* 19s. 1d. It is assured that 150,000*l.* will purchase the works and stocks, and as the capital of the new company is fixed at 200,000*l.*, in 40,000 5*l.* shares, that will leave 43,000*l.* of working capital. The stocks, however, are thought unnecessarily large, and by their reduction it is believed the money required may be reduced to 180,000*l.*, and in that case no more will be called up. The shareholders (preference and ordinary being dealt with alike) of the old company will have a prior right to the shares in the new, in the proportion of one 5*l.* for each 10*l.*, and any balance of capital not taken up by them by August 1 will be issued to the public, or may be otherwise disposed of. The rate of profit earned for the past nine years would, if maintained, yield a dividend on 180,000*l.* of fully 8¼ per cent. per annum.—*Glasgow Herald.*

PARIS, BRONZE MEDAL, 1867. ORDER OF THE CROWN OF PRUSSIA. FALMOUTH, SILVER MEDAL, 1867

A DIPLOMA—HIGHEST OF ALL AWARDS—given by the Geographical Congress, Paris, 1875—M. Favre, Contractor, having exhibited the McKean Drill alone as the MODEL BORING MACHINE of the ST. GOTHARD TUNNEL.

SILVER MEDAL of the Highland and West of Scotland Agricultural Society, 1875—HIGHEST AWARD.

At the south end of the St. Gothard Tunnel, where

THE McKEAN ROCK DRILLS

Are exclusively used, the advance made during eight consecutive weeks, ending February 7, was 24·90, 27·60, 24·80, 26·10 28·30, 27·10, 28·40, 28·70 metres. Total advance of south heading during January was 121·30 metres, or 133 yards.

In a series of comparative trials made at the St. Gothard Tunnel, the McKean Rock Drill continued to work until the pressure was reduced to one-half atmosphere (7½ lbs.), showing almost the entire motive force to be available for the blow against the rock—a result of itself indicating many advantages.

The GREAT WESTERN RAILWAY has adopted these Machines for the SEVERN TUNNEL; the LONDON AND NORTH-WESTERN RAILWAY for the FESTINIOG TUNNEL: and the BRITISH GOVERNMENT for several Public Works. A considerable number of Mining Companies are now using them. Shafts and Galleries are driven at from three to six times the speed of hand labour, according to the size and number of machines employed, and with important saving in cost. The ratio of advantage over hand labour is greatest where the rock is hardest.

These Machines possess many advantages, which give them value unapproached by any other system of Boring Machine.

THE McKEAN ROCK DRILL IS ATTAINING GENERAL USE THROUGHOUT THE WORLD FOR MINING, TUNNELLING, QUARRYING, AND SUB-MARINE BORING.

The McKEAN ROCK DRILLS are the most powerful—the most portable—the most durable—the most compact—of the best mechanical device. They contain the fewest parts—have no weak parts—act without SHOCK upon any of the operating parts—work with a lower pressure than any other Rock Drill—may be worked at a higher pressure than any other—may be run with safety to FIFTEEN HUNDRED STROKES PER MINUTE—do not require a mechanic to work them—are the smallest, shortest, and lightest of all machines—will give the longest feed without change of tool—work with long or short stroke at pleasure of operator.

The SAME Machine may be used for sinking, drifting, or open work. Their working parts are best protected against and accidents. The various methods of mounting them are the most efficient.

N.B.—Correspondents should state particulars as to character of work in hand in writing us for information, on receipt of which a special definite answer, with reference to our full illustrated catalogue, will be sent.

PORTABLE BOILERS, AIR COMPRESSORS, BORING STEEL, IRON, AND FLEXIBLE TUBING.

The McKean Drill may be seen in operation daily in London.

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MANUFACTURED FOR McKEAN AND CO. BY MESSRS P. AND W MACLELLAN, "CLUTHA IRONWORKS GLASGOW.

HEPBURN'S PUMP LEATHER WATERPROOF

By a special method of preparation this leather is made solid, perfectly close in xture and impermeable to water; it has, therefore, all the qualifications essential for pump buckets, and is the most durable material of which they can be ade. It may be had of all dealers in leather, and of—

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EATHER MILL BAND AND HOSE PIPE MANUFACTURERS
LONG LANE, SOUTHWARK LONDON
Prize Medals, 1851, 1855, 16 for
MILL BANDS, HOSE, AND LEATHER FOR MACHINERY PURPOSES.

THE UNDERSIGNED, having secured the Grants of several VALUABLE MINERAL PROPERTIES (TIN AND COPPER), in the St. Blazey District, in the vicinity of Fowey Consols, &c., is DESIROUS of OBTAINING the CO-OPERATION of CAPITALISTS for their EXPLORATION. There is little or no risk involved in the undertakings, and the capital required in each case is very limited. R. SYMONS
11, Parade, Truro, 3rd February, 1881.

MAP OF CALLINGTON, CALSTOCK, AND TAVISTOCK MINING DISTRICTS.

Proposed to be published by subscription, a MAP of the ABOVE DISTRICTS, showing the names and boundaries of all existing setts, lodes, cross-courses, and every other matter which such a map should contain. Persons disposed to patronise the publication—at One Guinea per copy—will please send their names as early as possible to me. R. SYMONS, Mineral Surveyor, Truro.
February 3rd 1881.

TO PARENTS AND GUARDIANS.

AN ELIGIBLE OPPORTUNITY is now offered for the SETTLEMENT of an ACTIVE YOUNG GENTLEMAN IN CANADA. He will be enabled to obtain his profession as a Solicitor in five, or if he be a Graduate in three years. Cost of living about £150. In the meantime he will have active work, and obtain a knowledge of the Dominion, which is destined to become one of the most prosperous of the Colonies. Premium, £100 sterling.
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32, Wellington-street, Toronto. Canada Land and Loan Agency.

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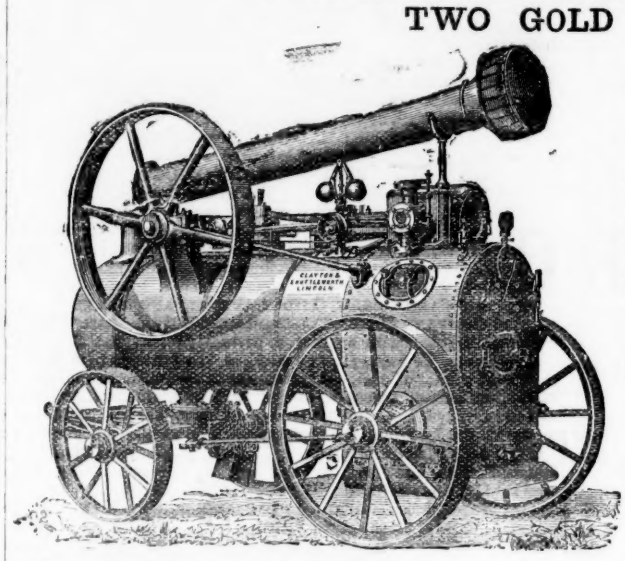

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Have been awarded to CLAYTON AND SHUTTLEWORTH at the various International Exhibitions of all Nations, including LONDON, 1851, 1862, PARIS, 1855, 1867, 1878. VIENNA 1857, 1866, 1873;
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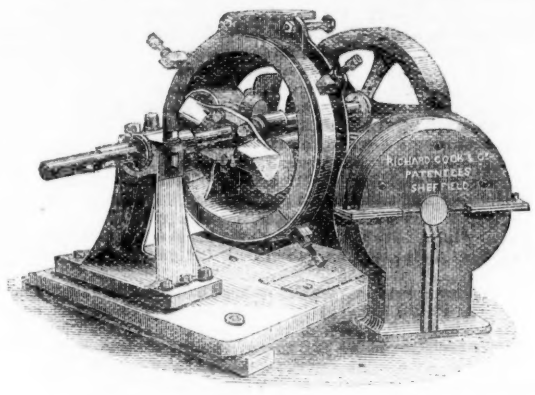

(Two tons per hour with 5 horse-power actual,)

For reducing to an impalpable powder, or to any requisite degree of fineness, all materials capable of being thus treated. CEMENT, CHEMICALS, GRAIN, COAL, COLOURS, PHOSPHATES, LIME, COPPER, TIN, ZINC, and other Ores with rapidity, completeness, and perfect uniformity.

THE ONLY GUARANTEED MACHINE FOR

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This mill consists of a circular iron casing, the section being elliptical in form, and is fixed vertically on a firm bed or foundation plate, a shaft runs through the centre of the casing on which is keyed a series of arms, in the extremities of which revolve two or more slightly oblong iron rollers, which, when put in motion, fly off from the centre and run upon the interior periphery of the casing, and by centrifugal force crush and pulverise the article under treatment.

The effect produced by this system is most extraordinary in its practical results, the power required is small in consequence of the comparative absence of friction from the working parts of the mill, the combined results of the rolling action of the crushers and their impact by centrifugal force on the material, being the same in kind, but in degree far exceeding that of edge runners, the sides of the casing are formed as open wire sieves of the degree of fineness required, and a series of propelling blades attached to and revolving with the central shaft drive the material under treatment through the sieves as it is pulverised; by this arrangement the degree of fineness can with certainty be arrived at from coarse to extreme fine, and that with uniformity.

Intending purchasers can at all times satisfy themselves by sending the material they wish to operate on, and seeing it pulverised. Over 300 in use. Prices and testimonials free on application.

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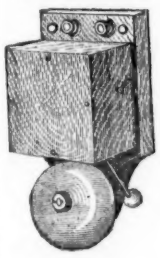
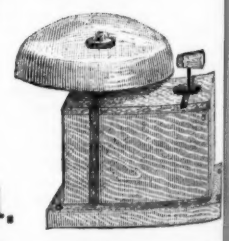


AND OTHER TELEGRAPHIC APPARATUS FOR MINES, &c.



Prize Medal - - - London, 1862.
First Prize - - - Sydney, 1879.
Prize Medal - - - Melbourne, 1881.

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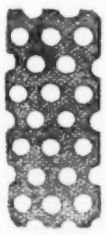

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Jigger Bottoms and Cylinder Covers woven ANY WIDTH, in Iron, Steel, Brass, or Copper
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